

FIG. 1

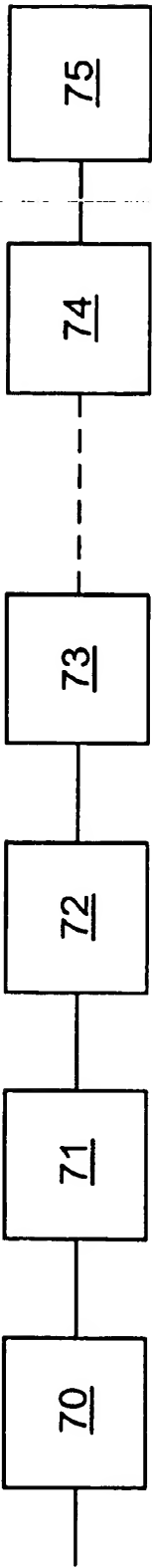


FIG. 2

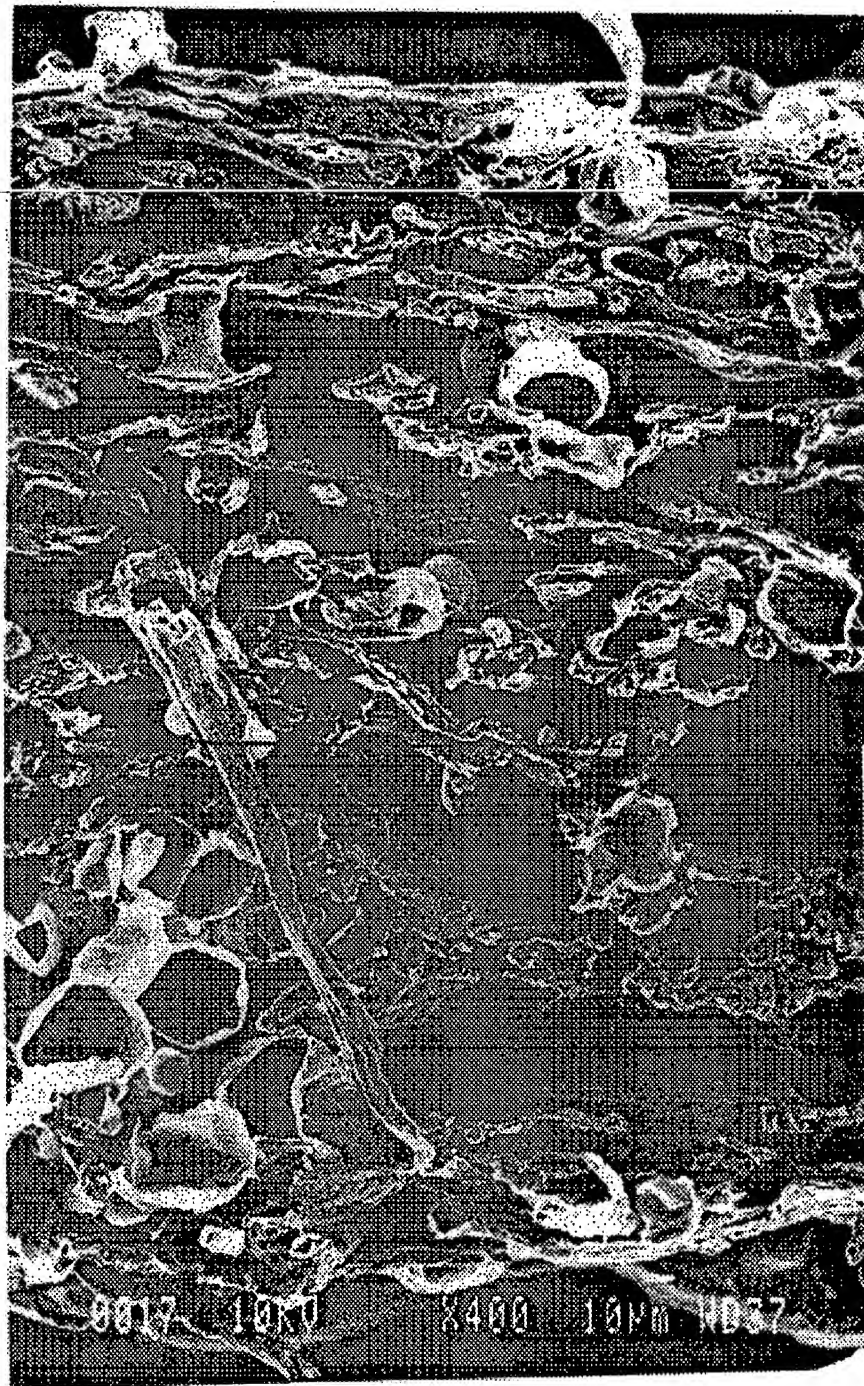


FIG. 3

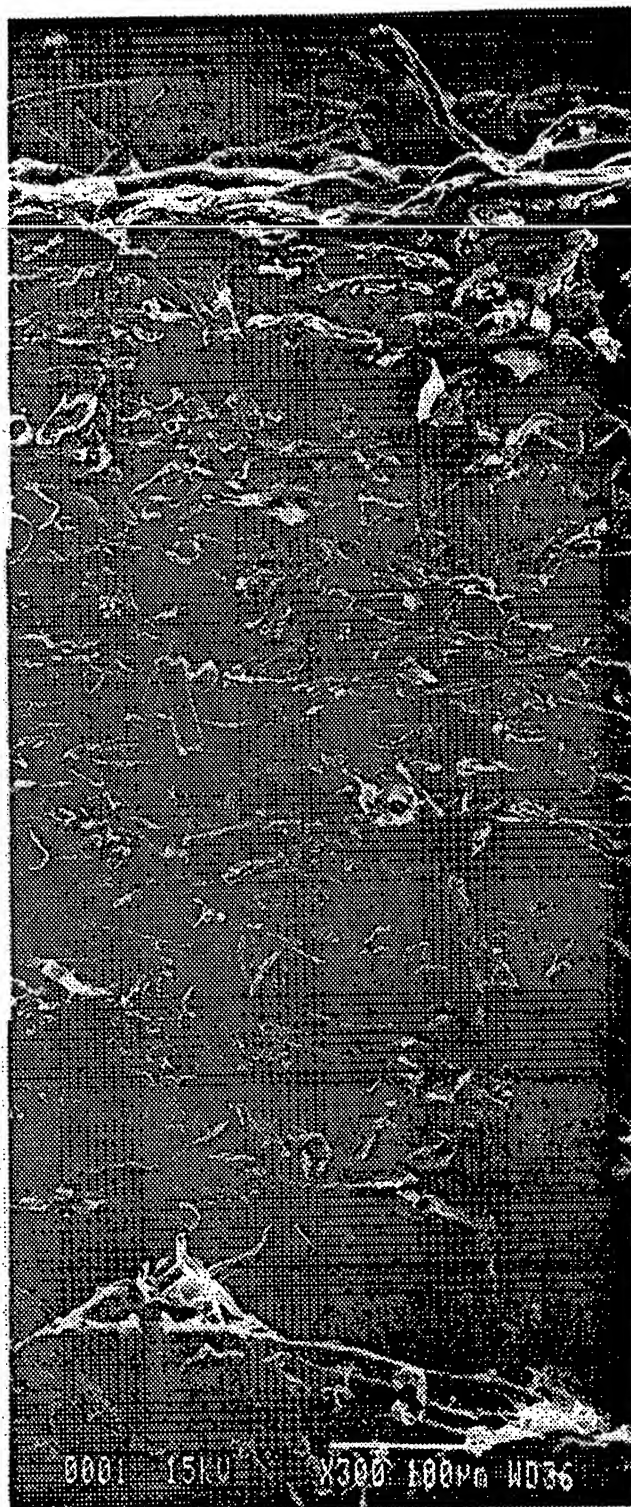
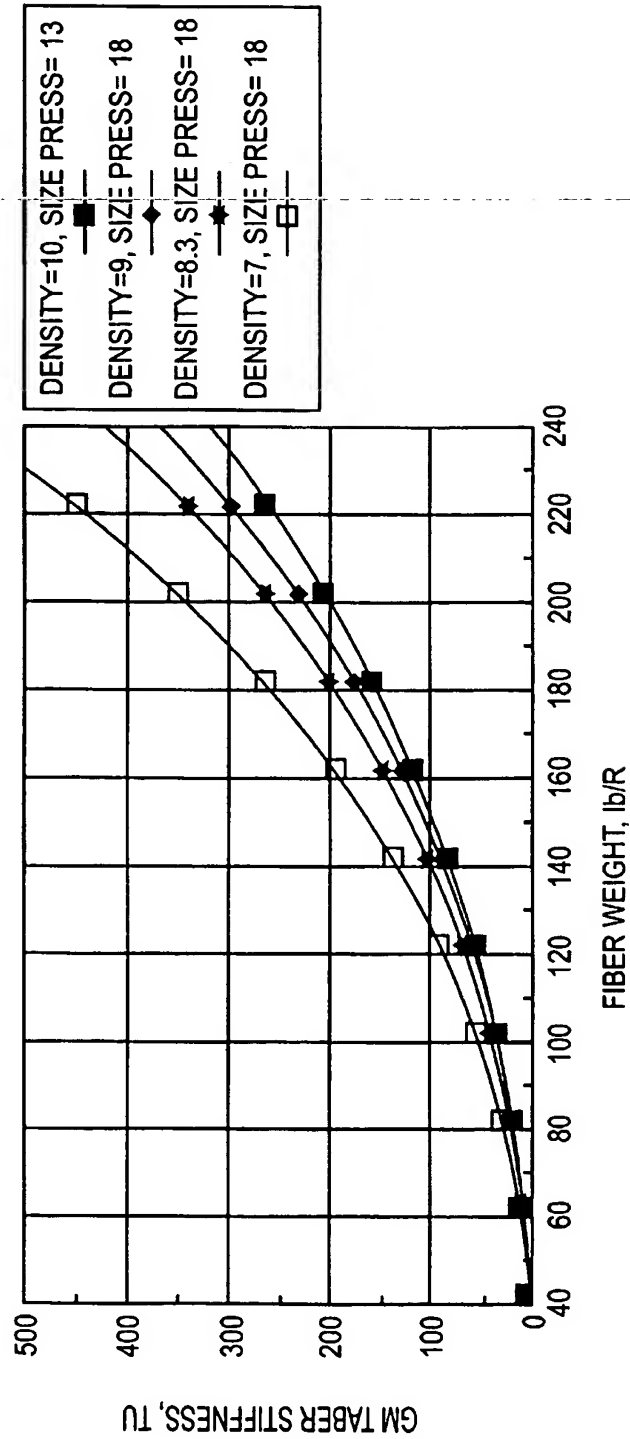


FIG. 4

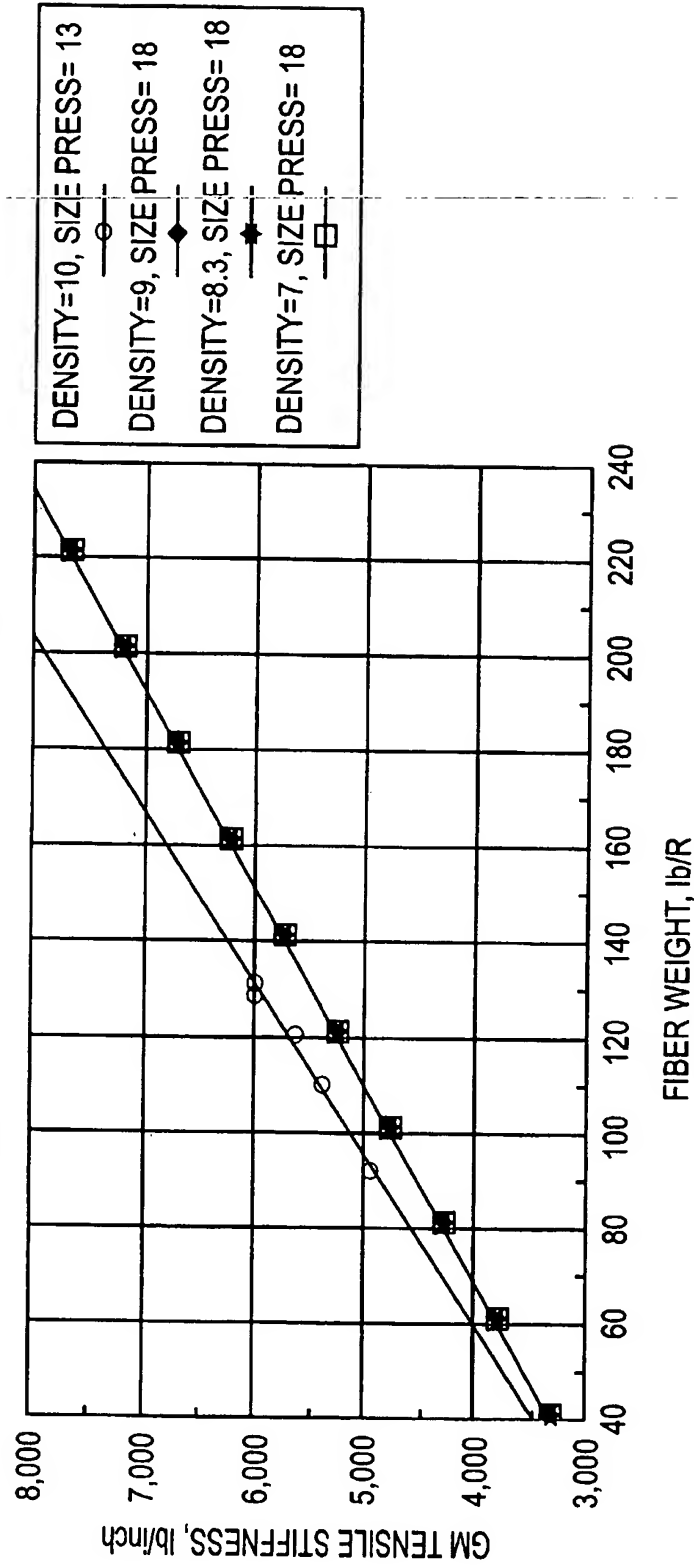
GM TABER STIFFNESS VS FIBER WEIGHT, FIBER DENSITY, AND SIZE PRESS WEIGHT
FOR BENDTSEN SMOOTHNESS AT 400 OR LESS



1. DENSITY VALUES SHOWN ARE FIBER MAT DENSITIES. (FIBER WEIGHT/CALIPER)

FIG. 5

GM TENSILE STIFFNESS VS FIBER WEIGHT, FIBER DENSITY, AND SIZE PRESS WEIGHT
FOR BENDTSEN SMOOTHNESS AT 400 OR LESS



1. DENSITY VALUES SHOWN ARE FIBER MAT DENSITIES. (FIBER WEIGHT/CALIPER)

FIG. 6

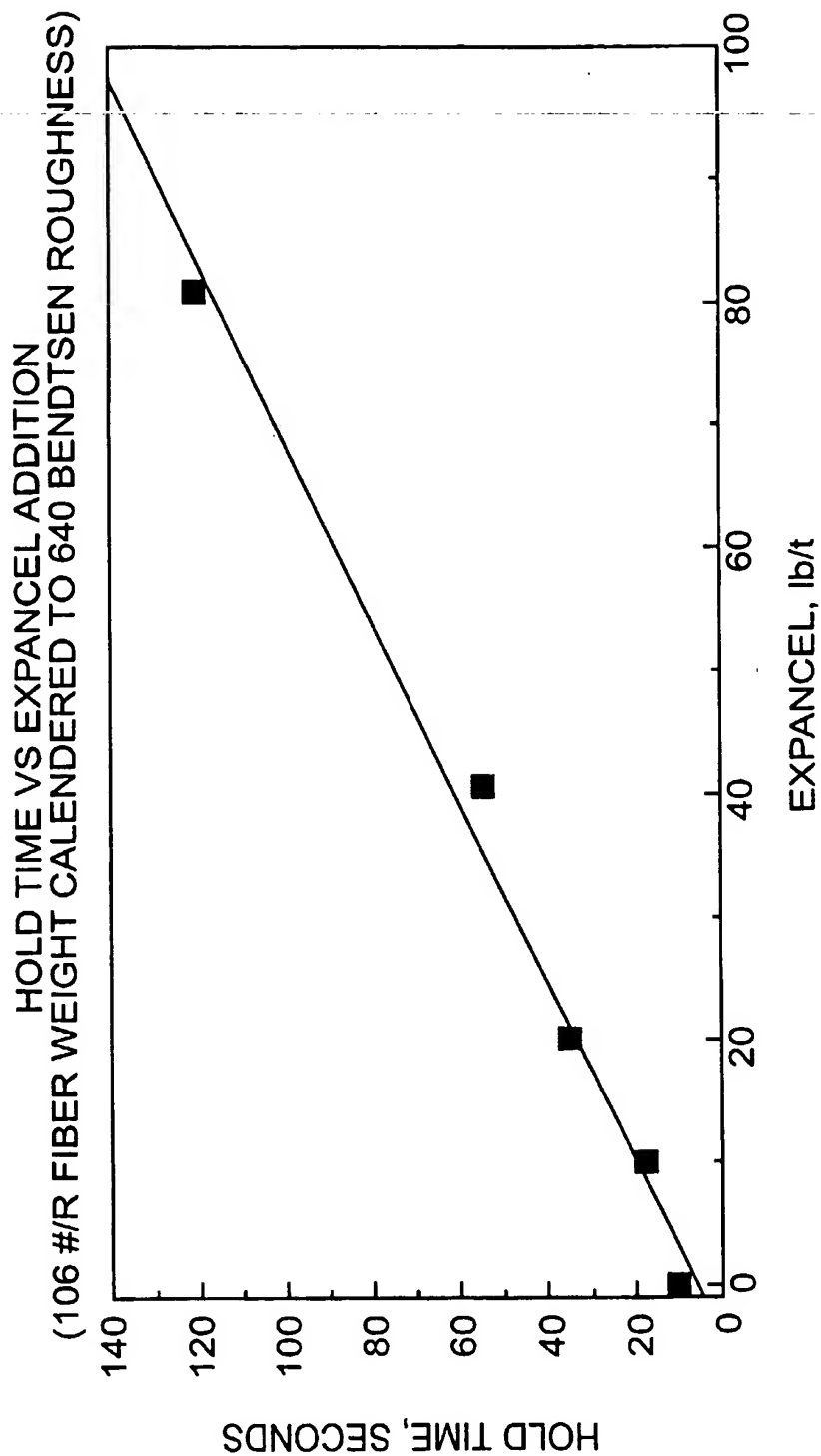
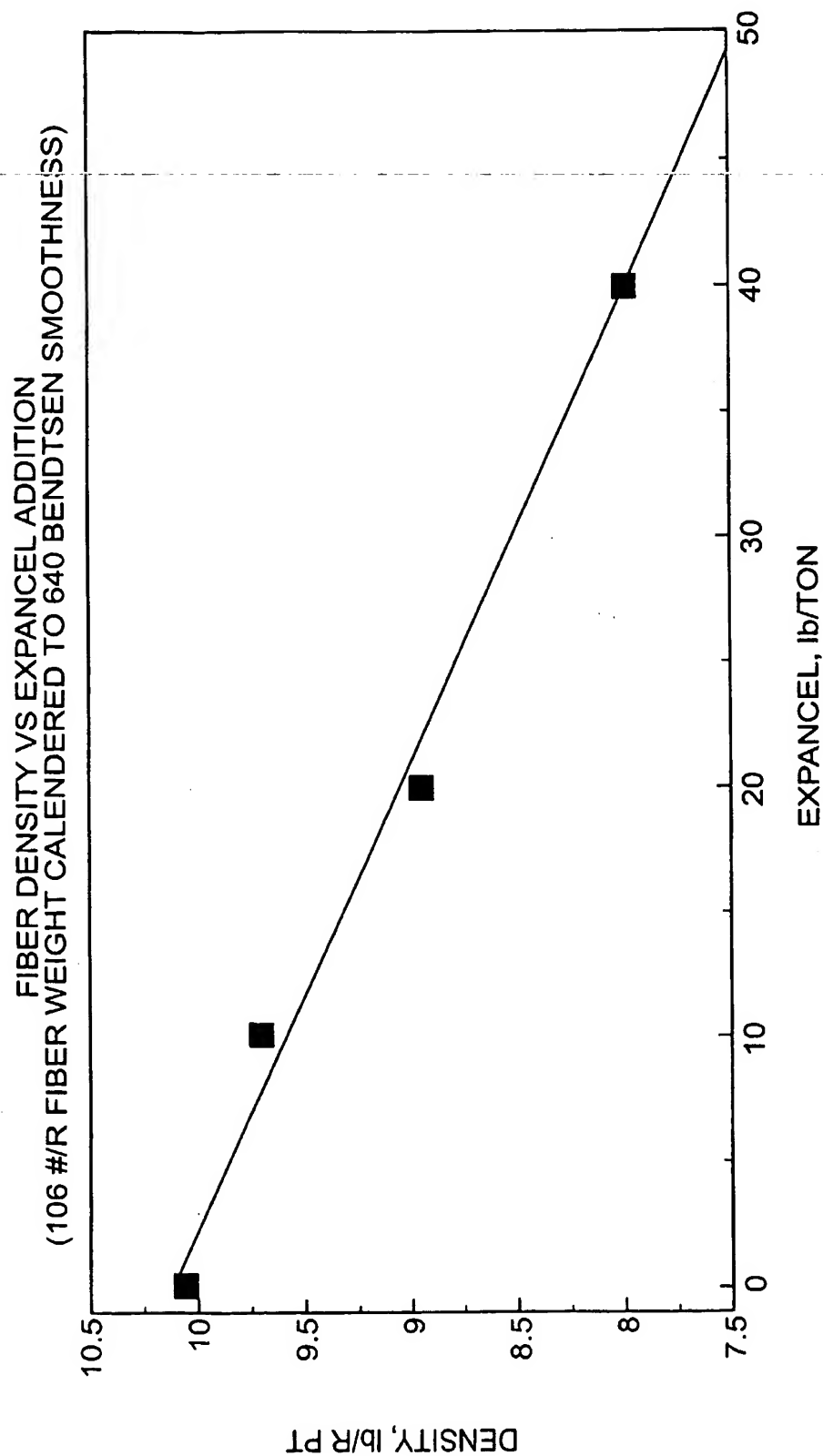


FIG. 7



EXPANCEL, lb/TON

FIG. 8

EFFECT ON BOARD DENSITY OF
INCREASING THE AMOUNT OF RETAINED
MICROSPHERES

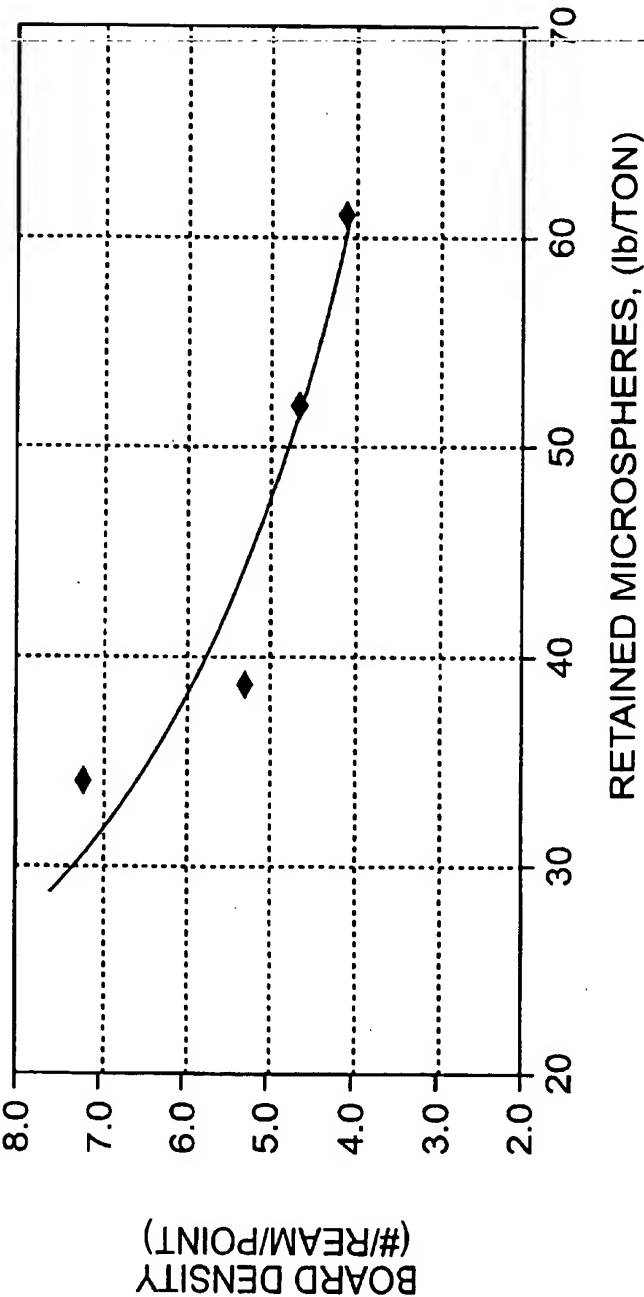


FIG. 9

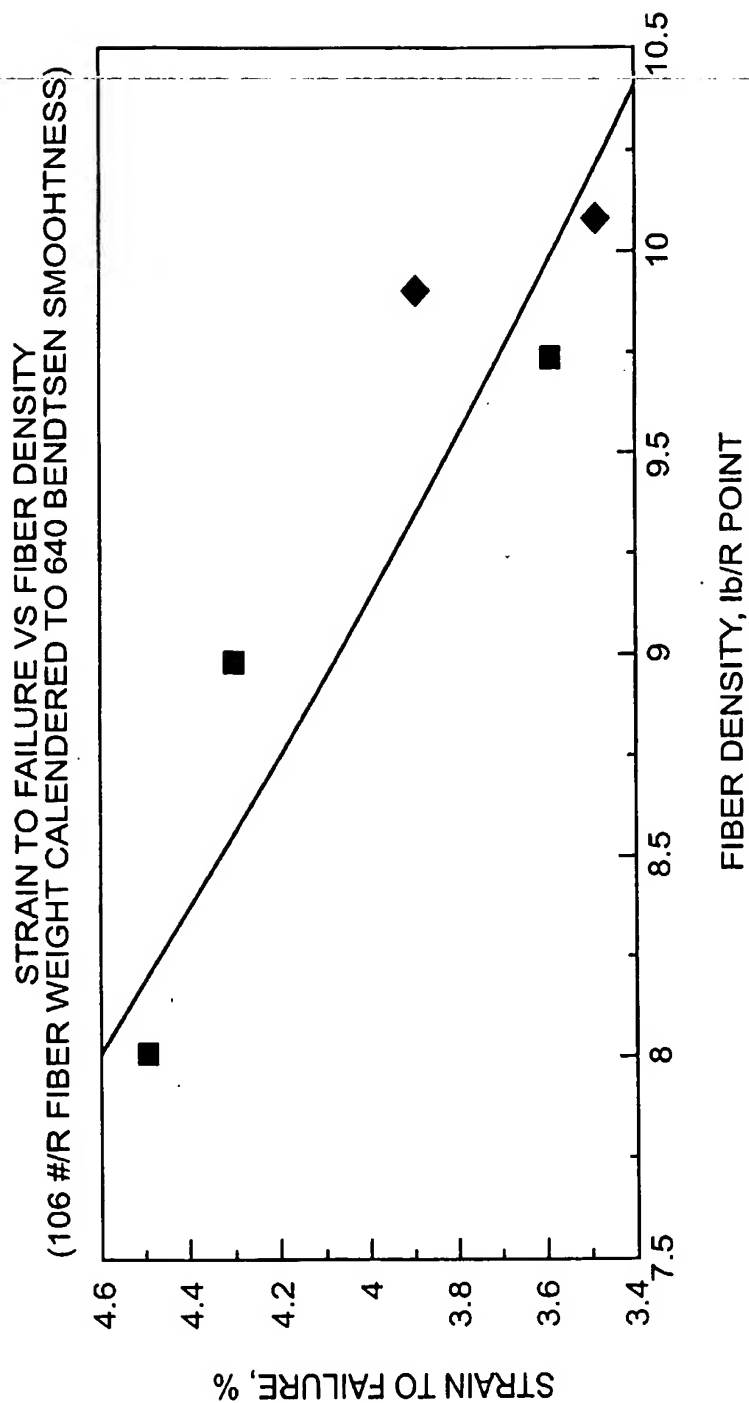
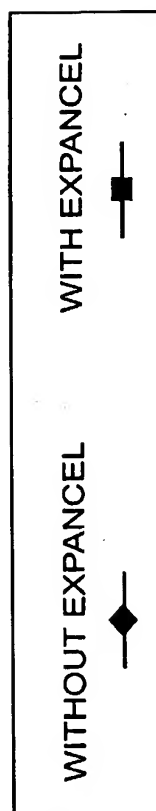


FIG. 10



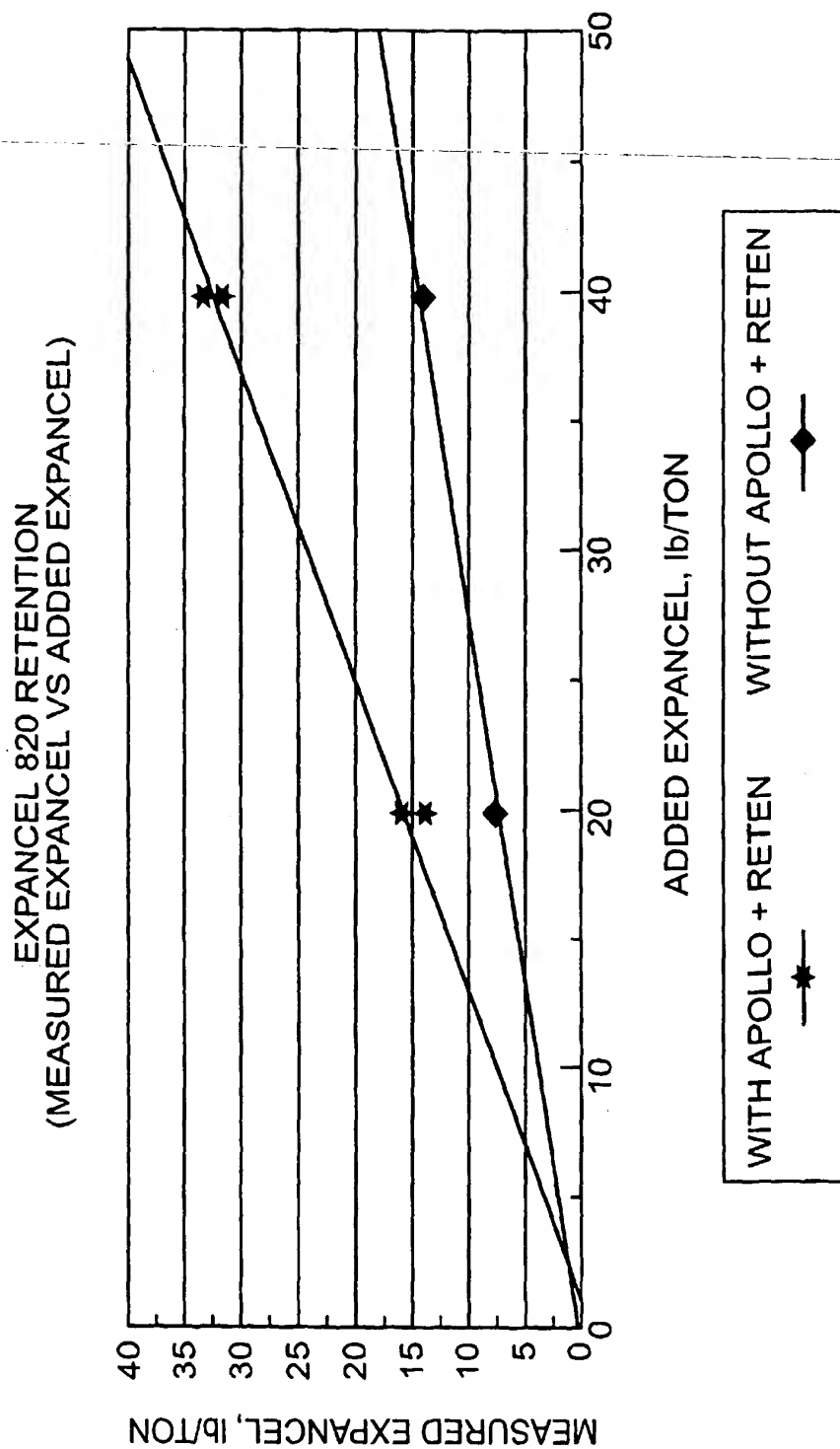


FIG. 11

1. EXPANCEL RETENTION WITH APOLLO + RETEN=83%
2. EXPANCEL RETENTION WITHOUT APOLLO + RETEN=36%

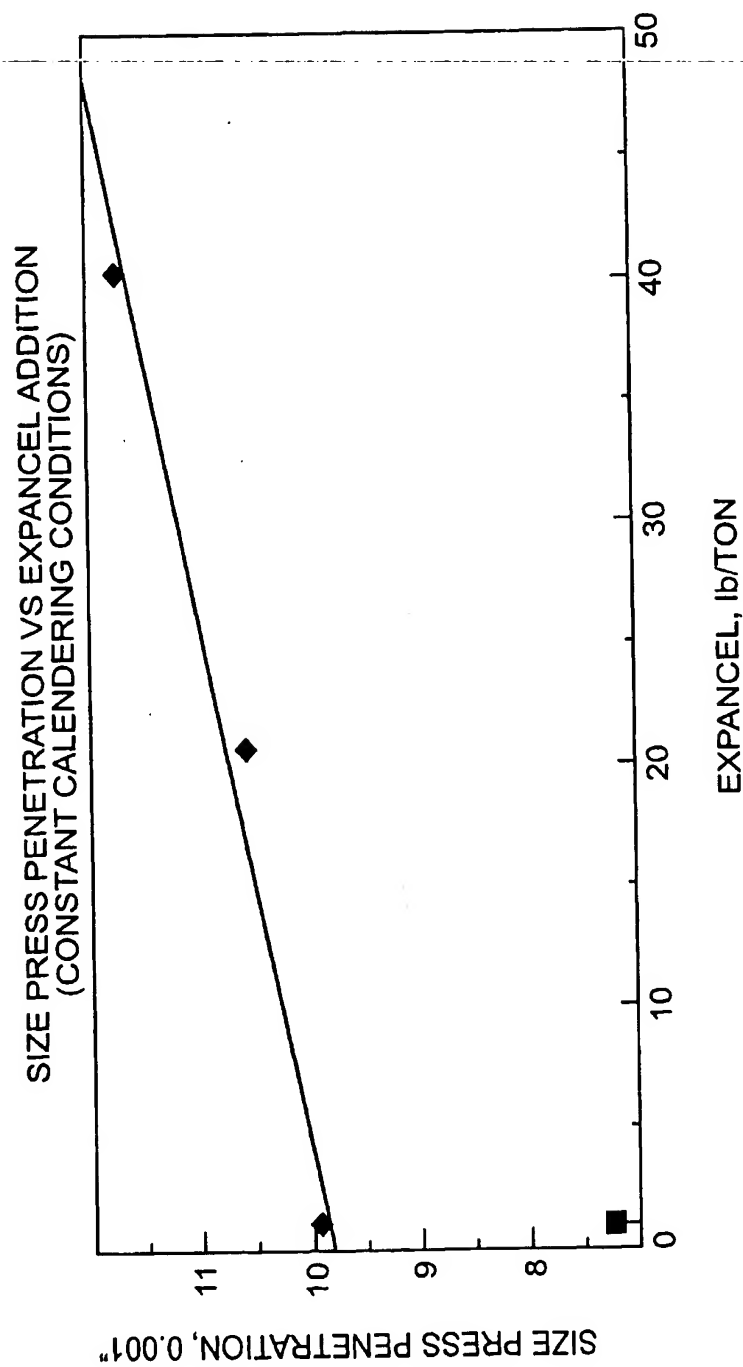
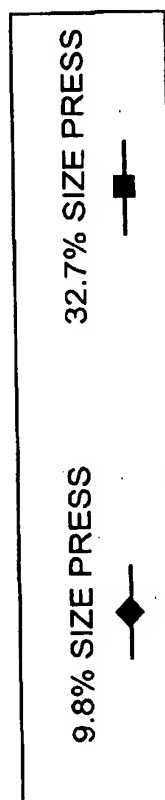


FIG. 12



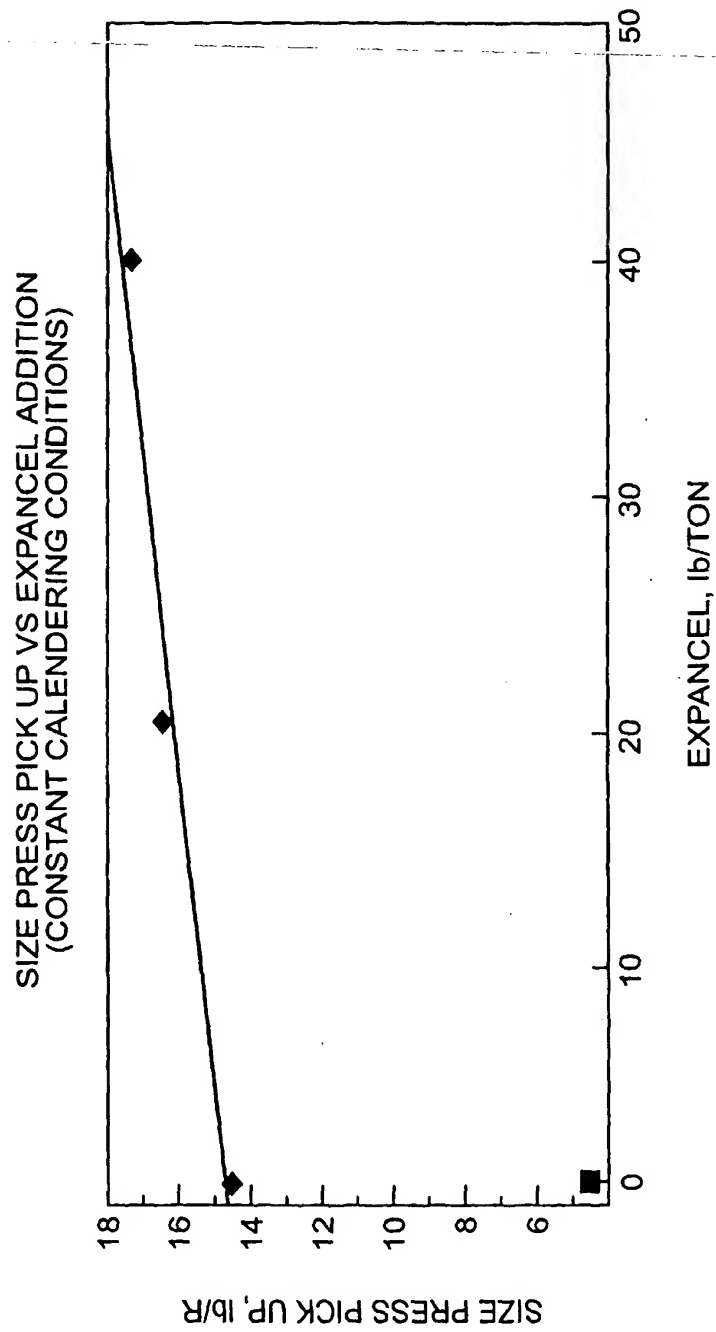
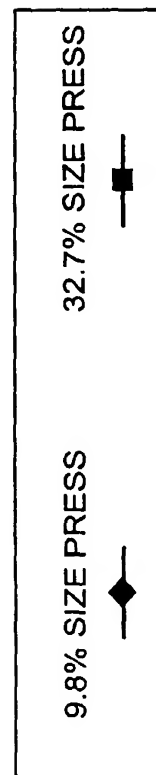


FIG. 13



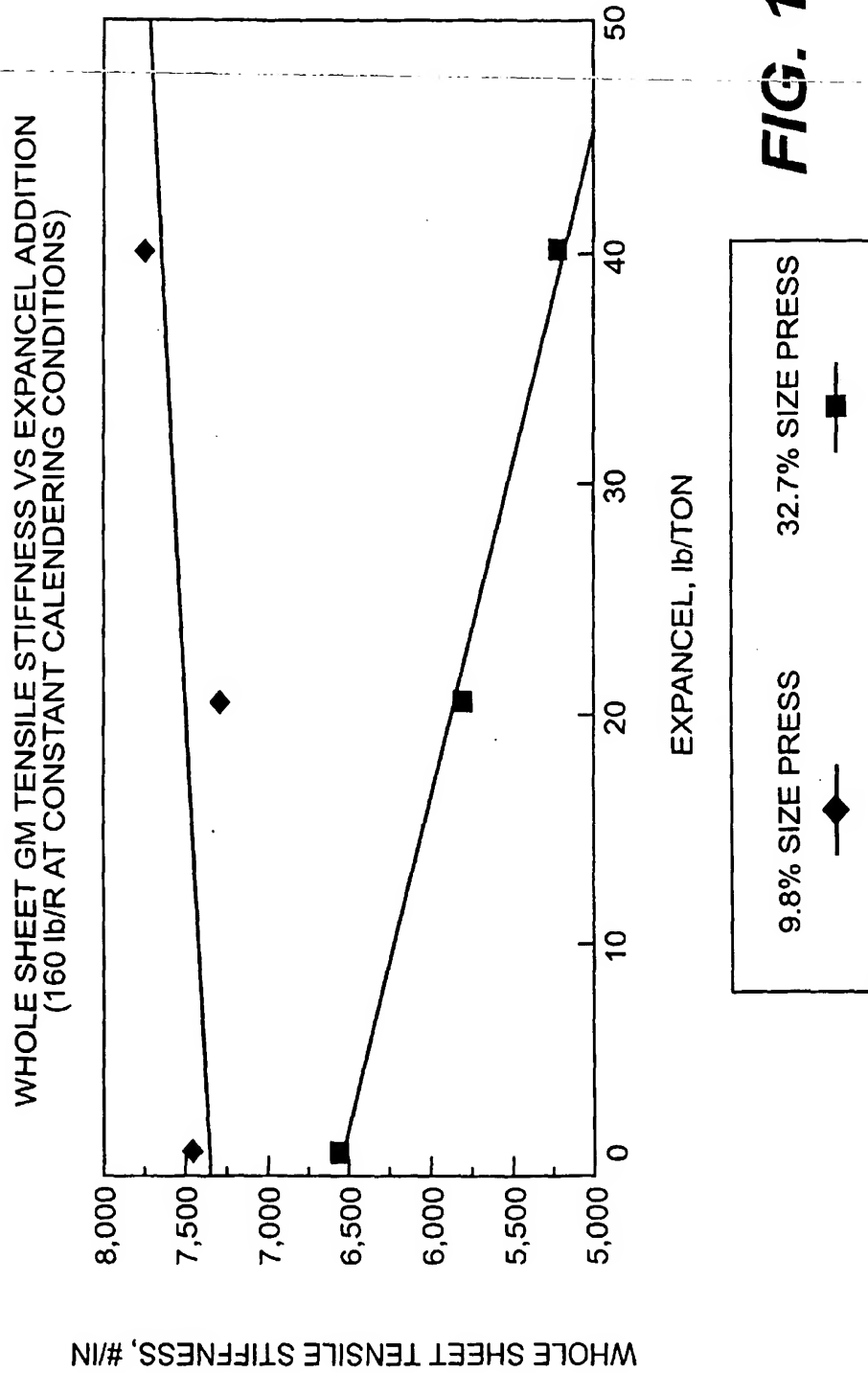


FIG. 14

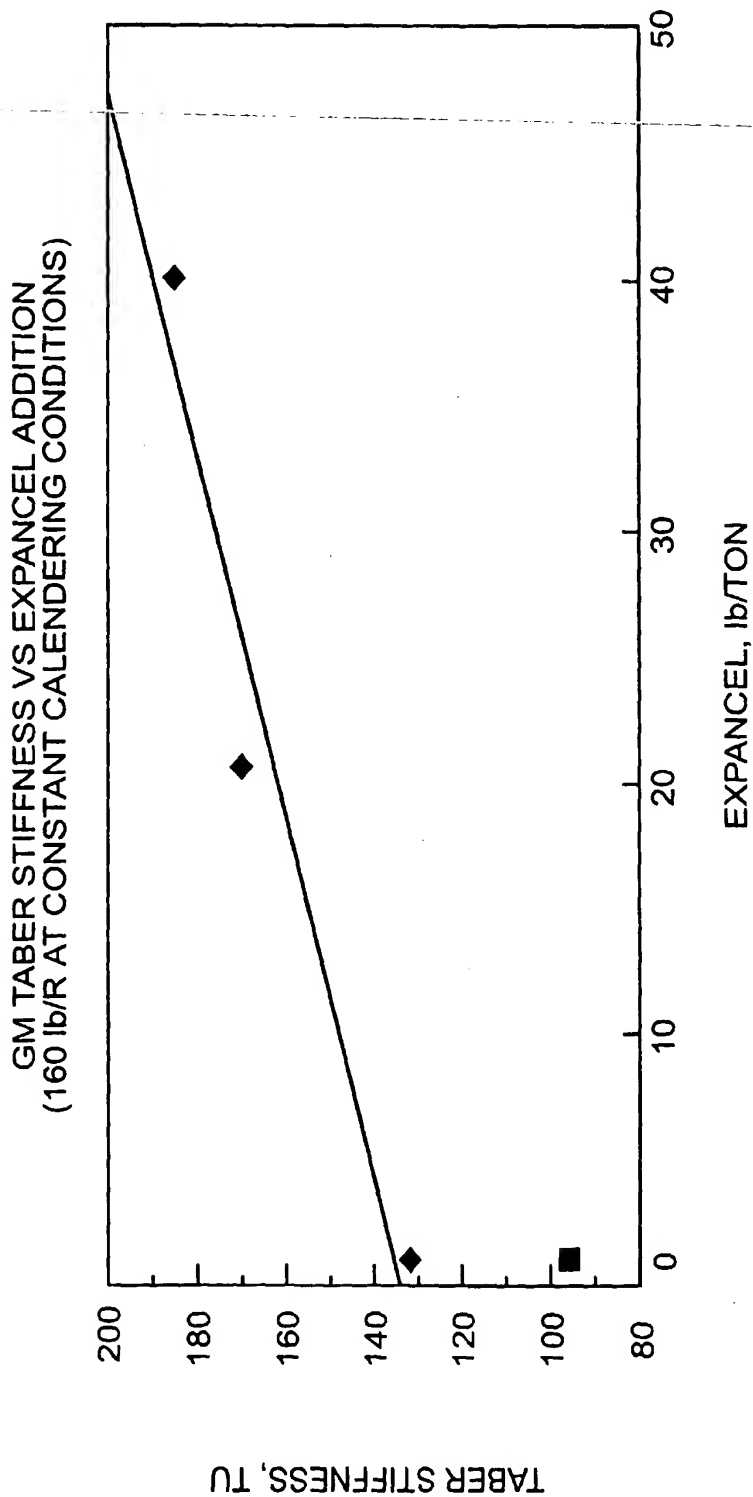


FIG. 15

PLATE

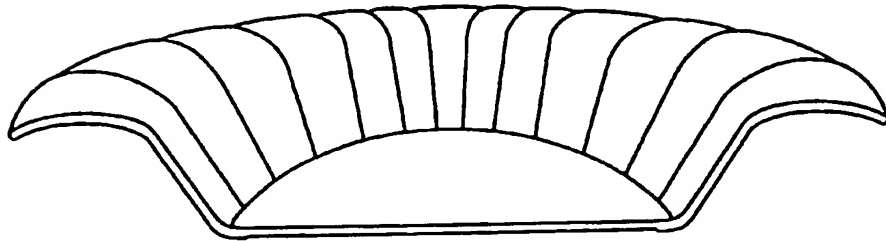


FIG. 16A

PLATE

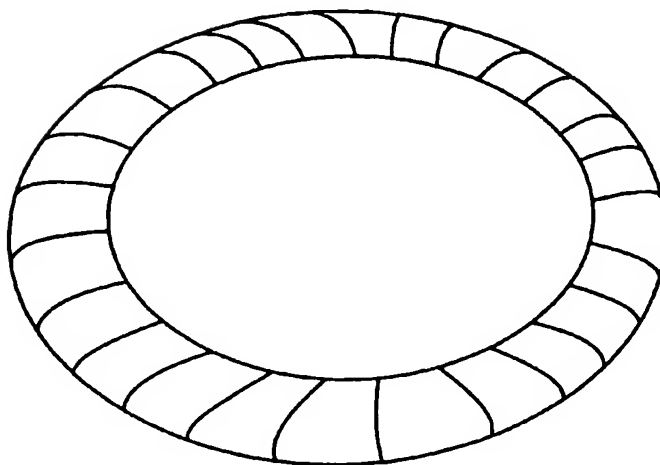


FIG. 16B

PLATE

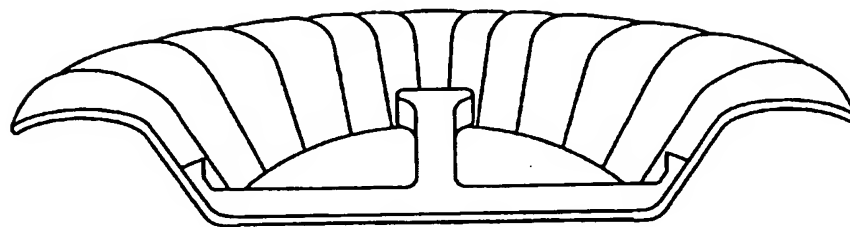


FIG. 17A

PLATE

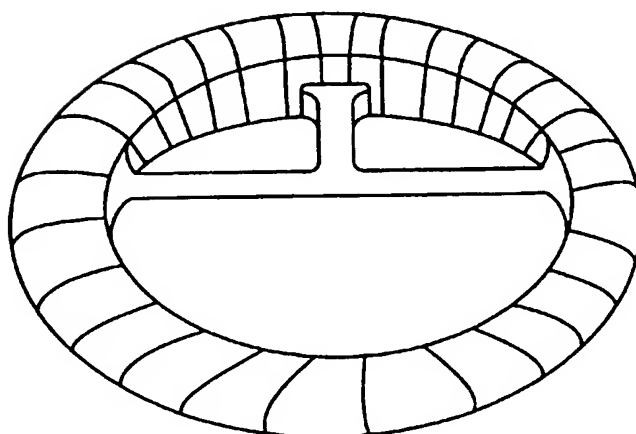


FIG. 17B

BOWL

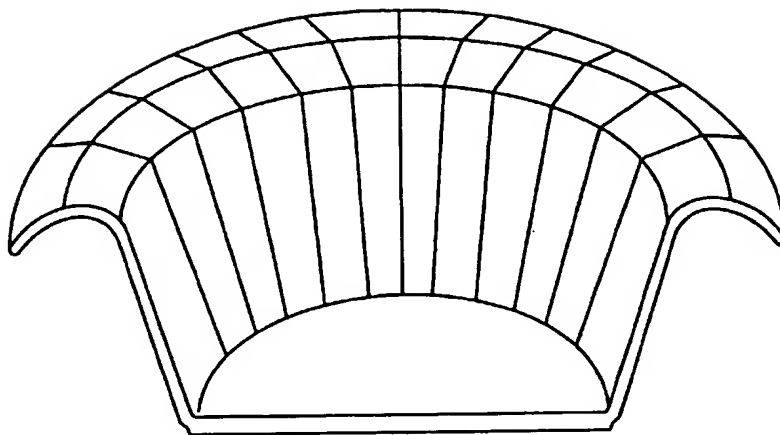


FIG. 18A

BOWL

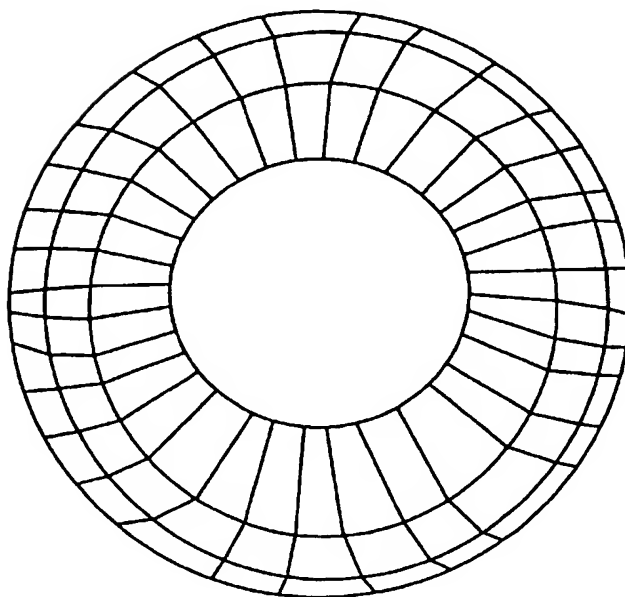


FIG. 18B

CANISTER

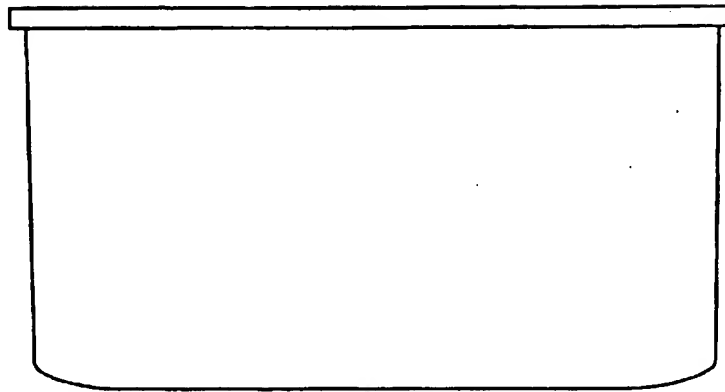


FIG. 19A

CANISTER

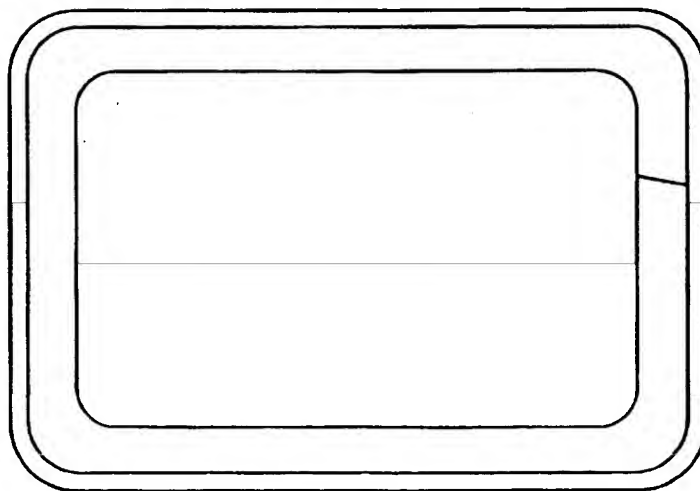


FIG. 19B

FRENCH FRIES SLEEVE

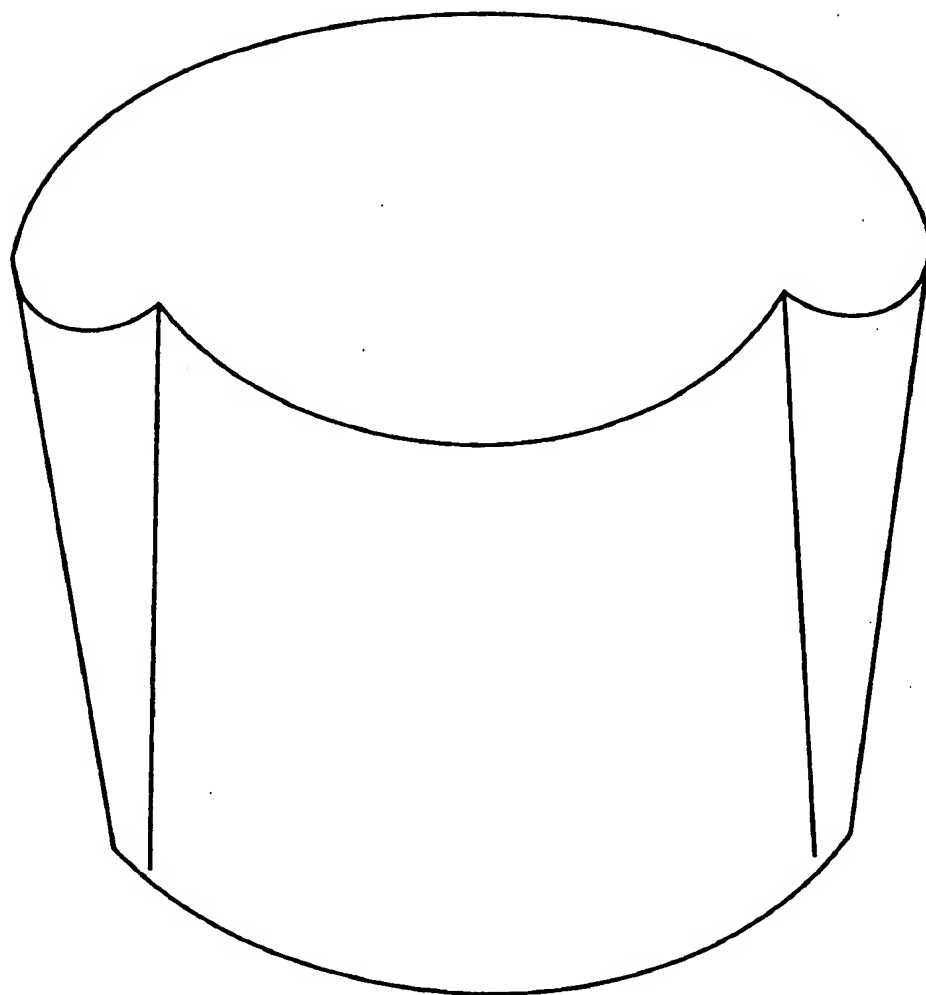


FIG. 20

HAMBURGER CLAMSHELL

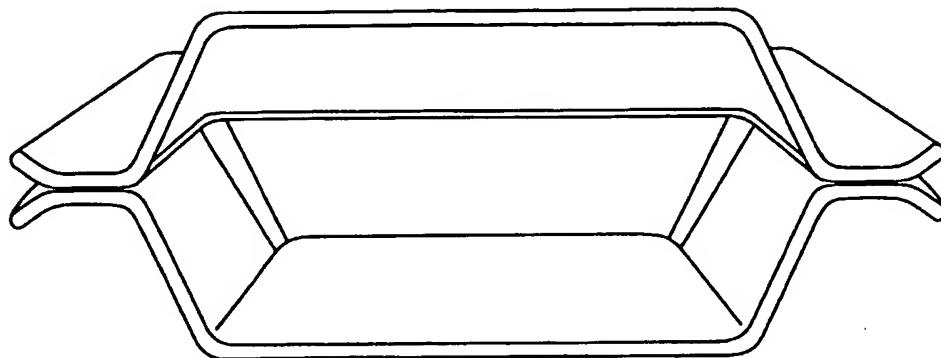


FIG. 21A

HAMBURGER CLAMSHELL

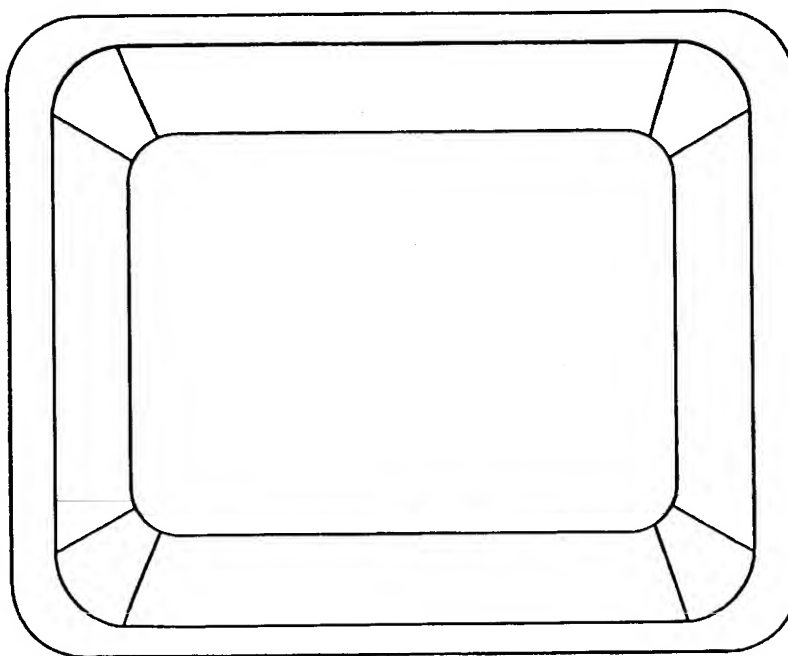


FIG. 21B

RECTANGULAR TAKE-OUT CONTAINER

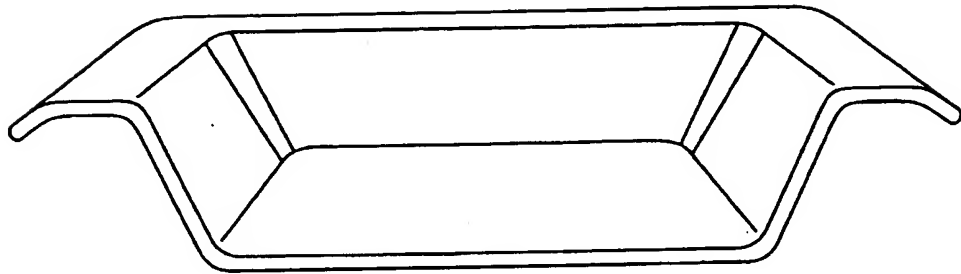


FIG. 22A

RECTANGULAR TAKE-OUT CONTAINER

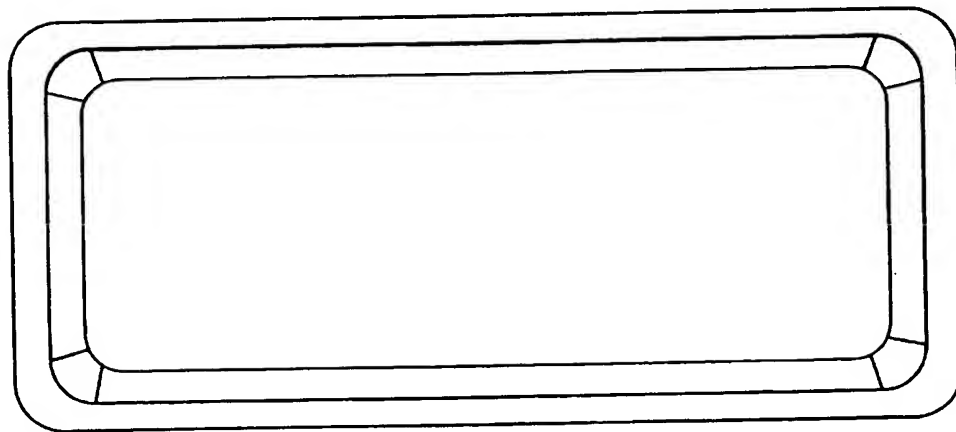


FIG. 22B

CUP

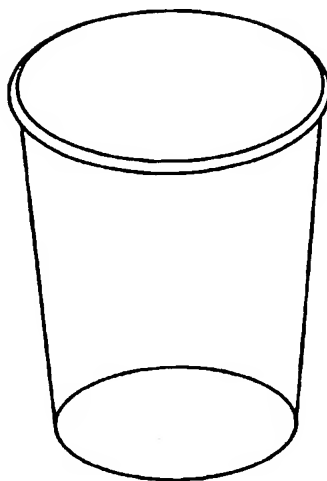


FIG. 23A

CUP

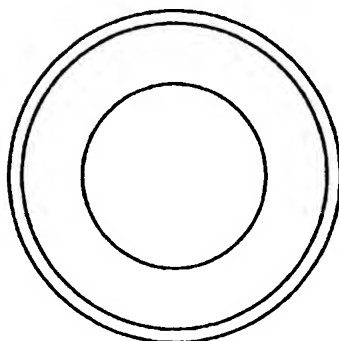


FIG. 23B

CUP

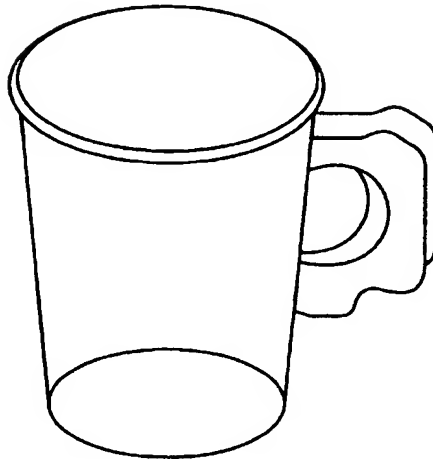


FIG. 24A

CUP

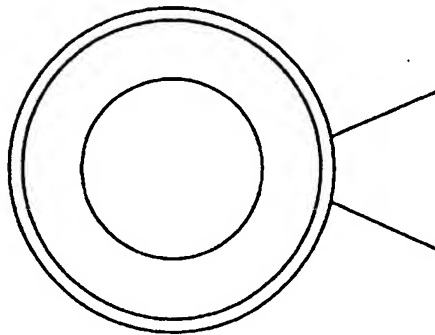


FIG. 24B

FOOD BUCKET

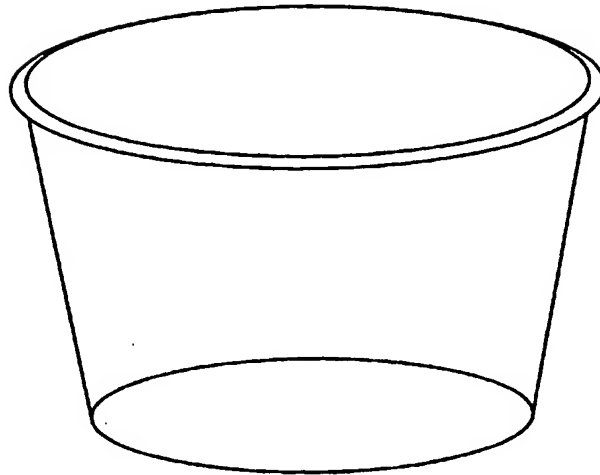


FIG. 25A

FOOD BUCKET

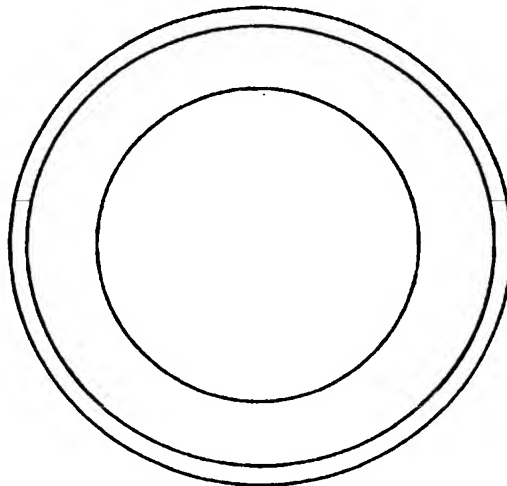
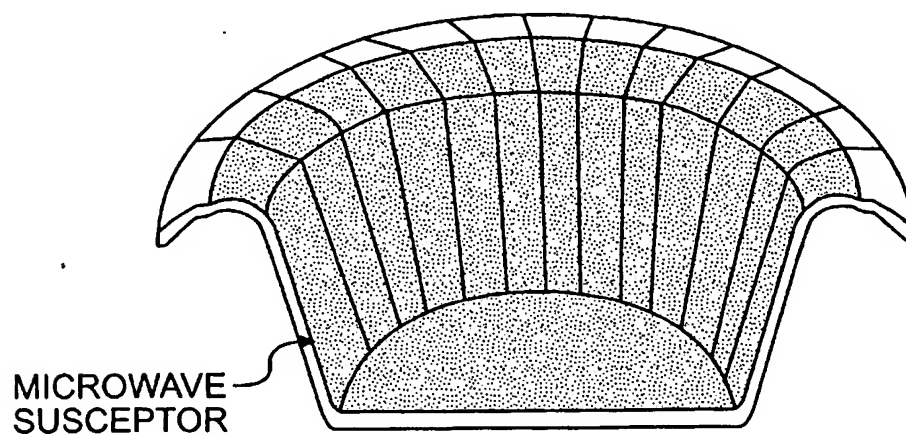
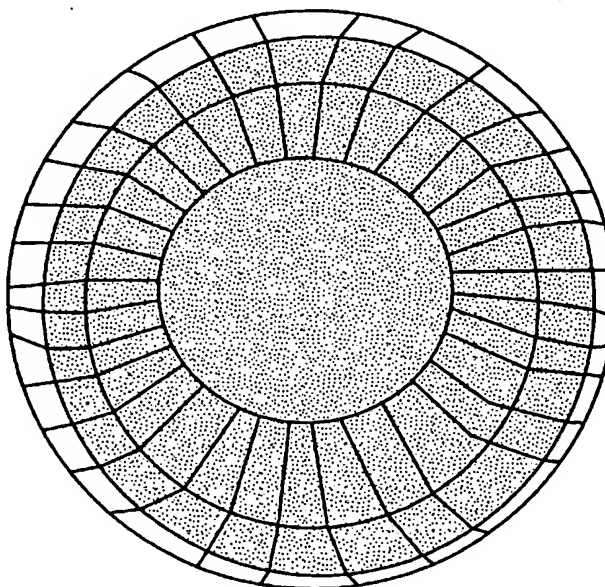


FIG. 25B

BOWL WITH MICROWAVE SUSCEPTOR LAYER

**FIG. 26A**

BOWL WITH MICROWAVE SUSCEPTOR LAYER

**FIG. 26B**

FOOD CONTAINER WITH
MICROWAVE SUSCEPTOR LAYER

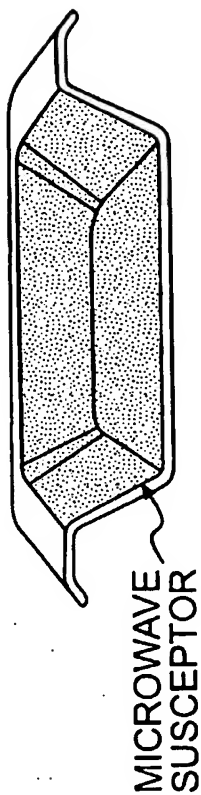


FIG. 27A

FOOD CONTAINER WITH
MICROWAVE SUSCEPTOR LAYER

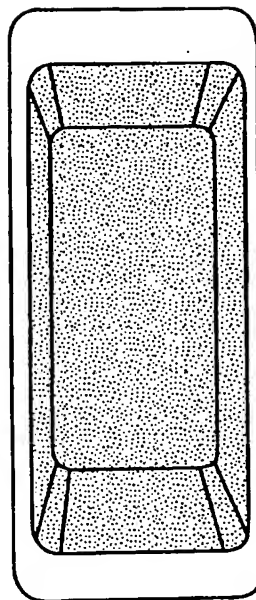
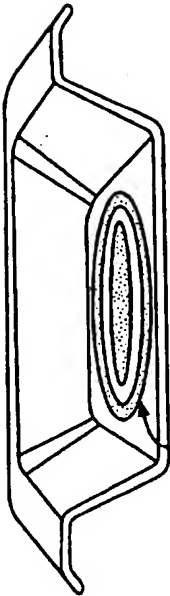


FIG. 27B

FOOD CONTAINER WITH
MICROWAVE SUSCEPTOR LAYER



MICROWAVE
SUSCEPTOR

FIG. 27C

FOOD CONTAINER WITH
MICROWAVE SUSCEPTOR LAYER

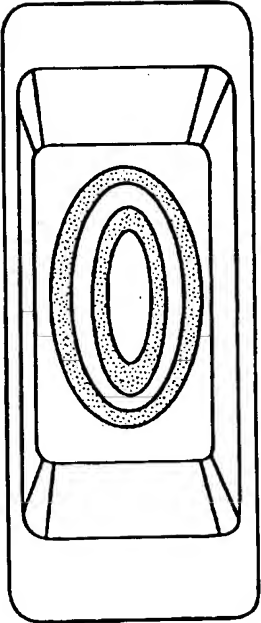
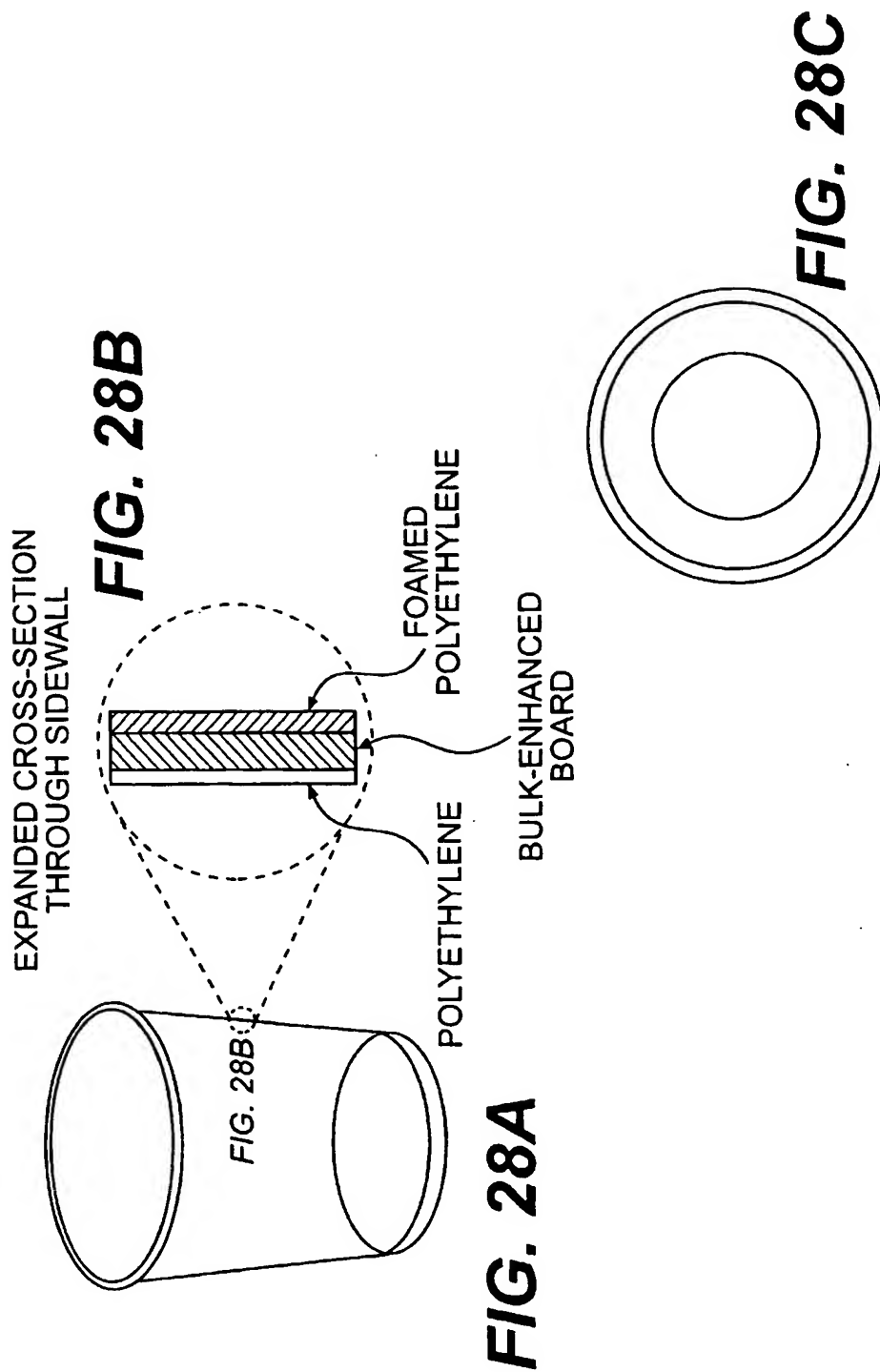


FIG. 27D

CUP WITH ADDITIONAL INSULATION FEATURE



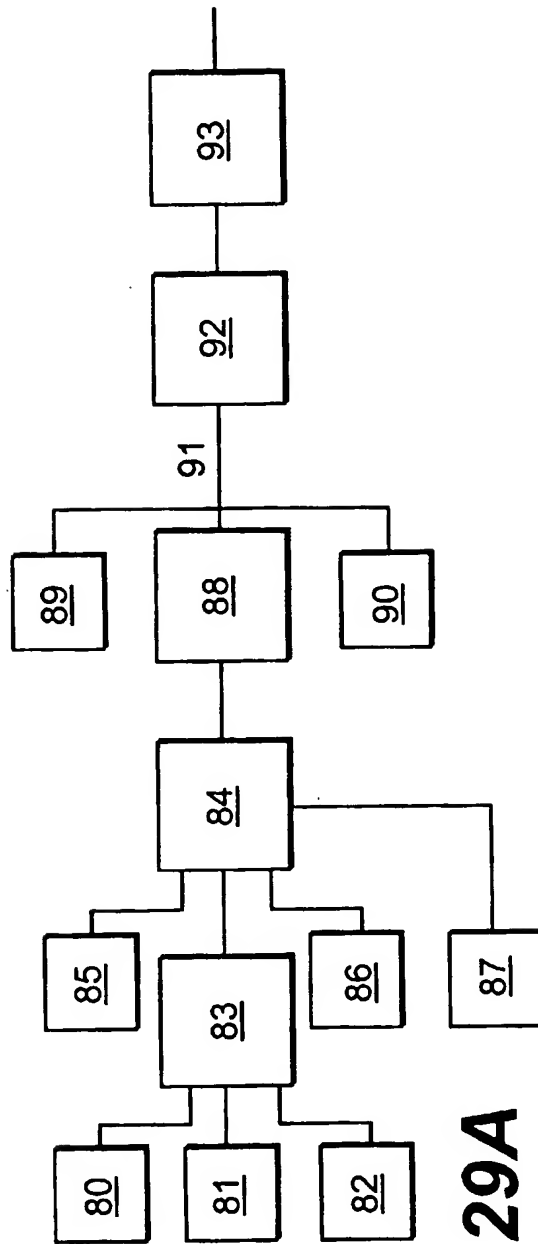


FIG. 29A

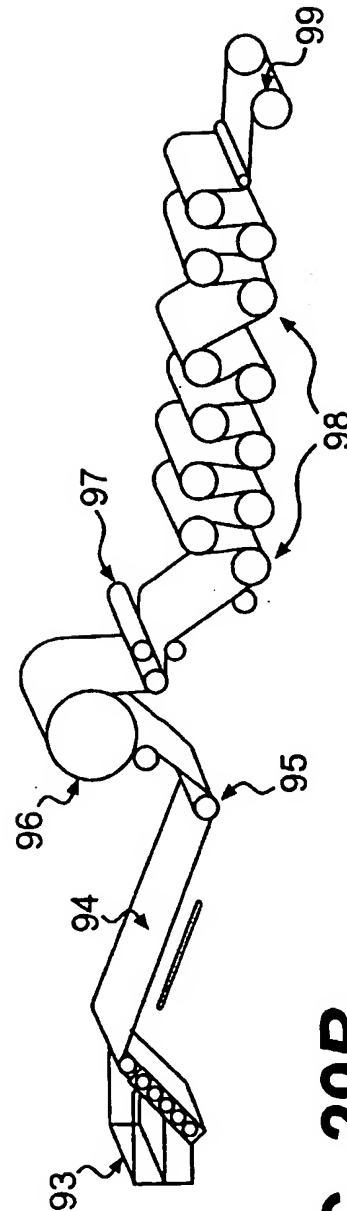
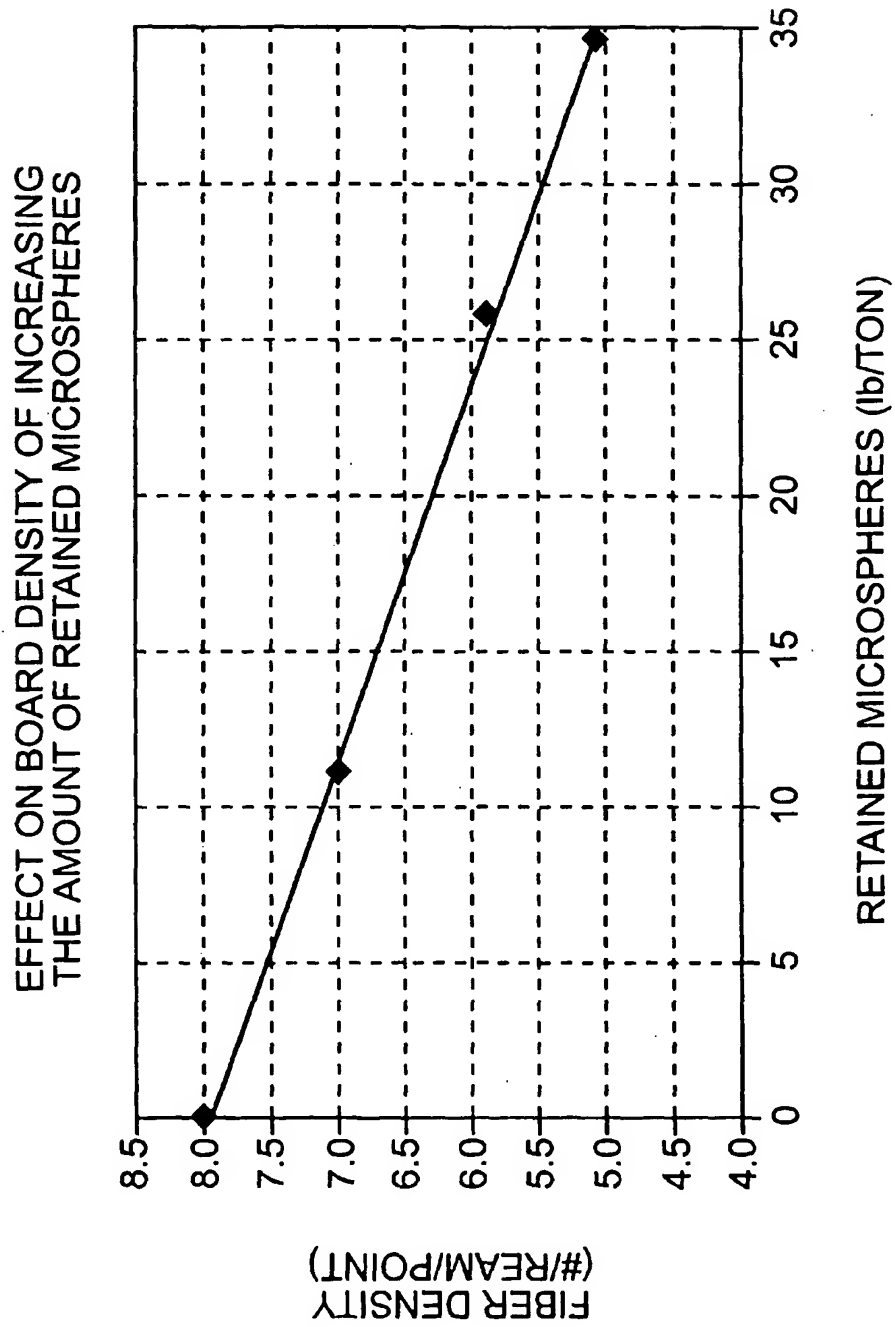


FIG. 29B

**FIG. 30**

EXPANCEL 820WU RETENTION
 RETEN 203 RETENTION AID
 (MACHINE CHEST ADDITION OF ADDITIVES VS STUFF BOX ADDITION)

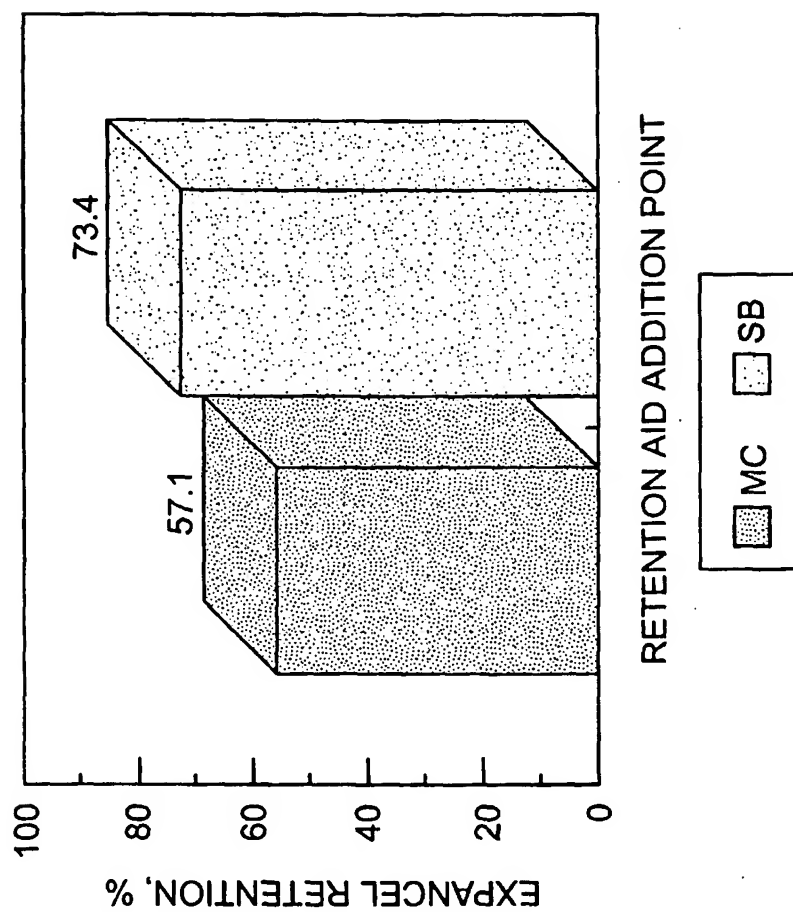
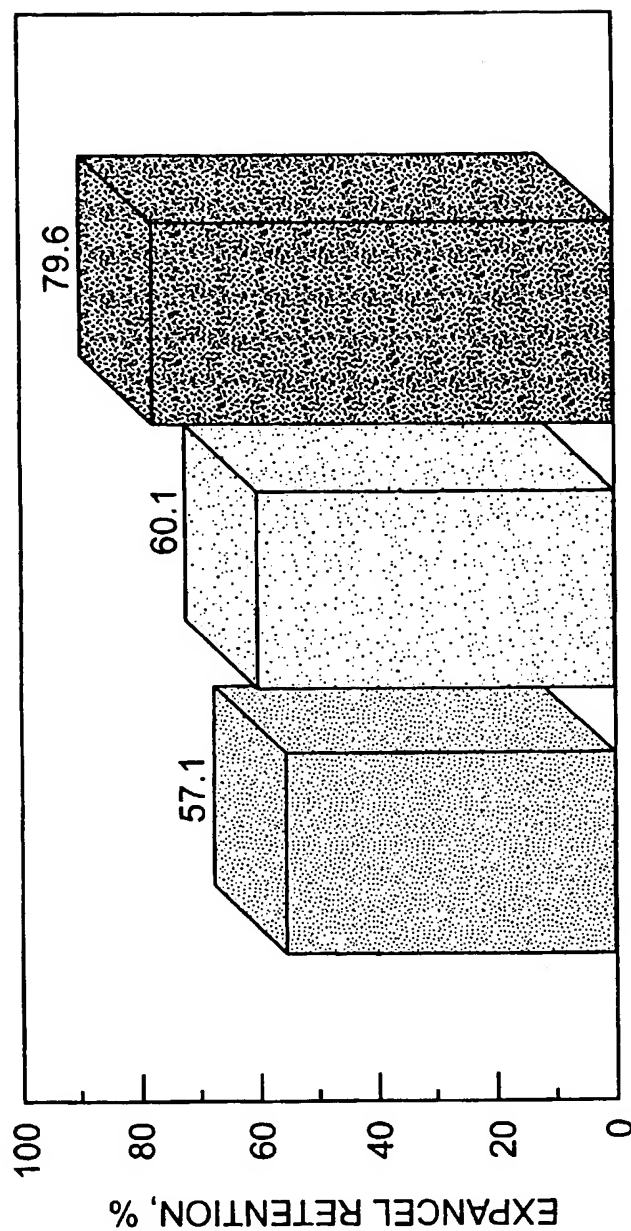


FIG. 31A

EXPANCEL 820WU RETENTION
MICROPARTICLE RETENTION AIDS
(BENTONITE VS ORGANIC COLLOID)



RETENTION AID SYSTEM

RETEN 203 RETEN+NALCO 8678 MF 2321+BENTONITE

FIG. 31B

EXPANCEL 820WU RETENTION
HIGH MOLECULAR WEIGHT CATIONIC RETENTION AIDS

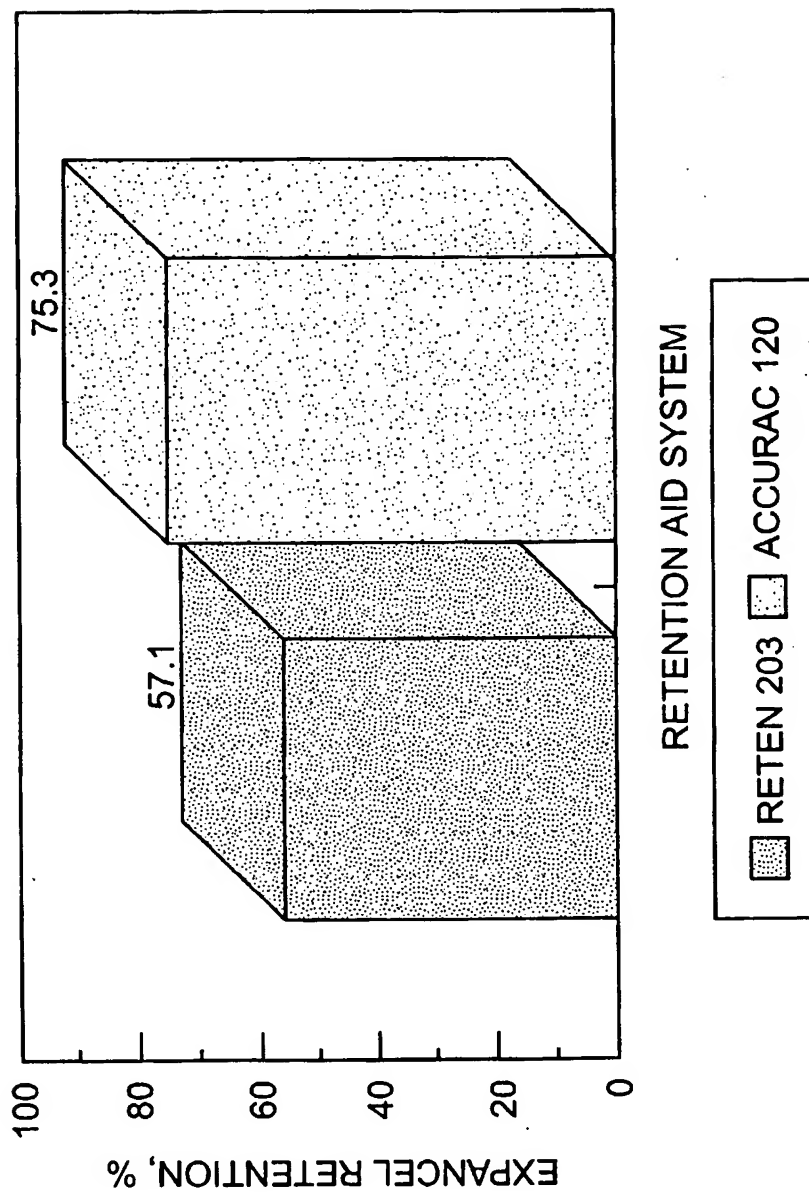
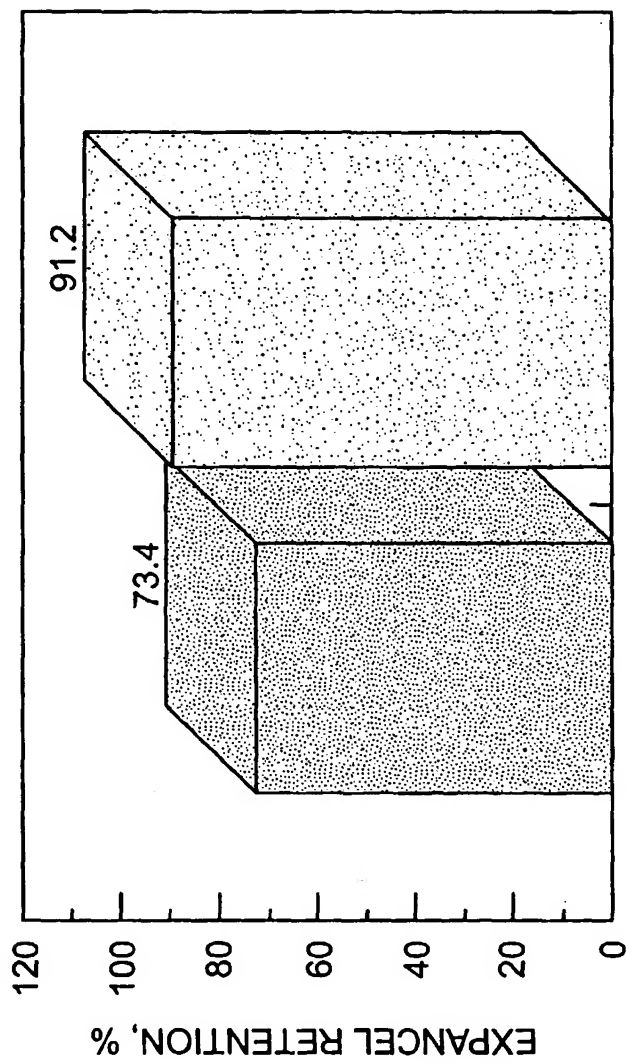


FIG. 31C

EXPANCEL 820WU RETENTION
DUAL POLYMER RETENTION AIDS



RETENTION AID SYSTEM

RETEN 203 RETEN 203+NALCO 625

FIG. 31D

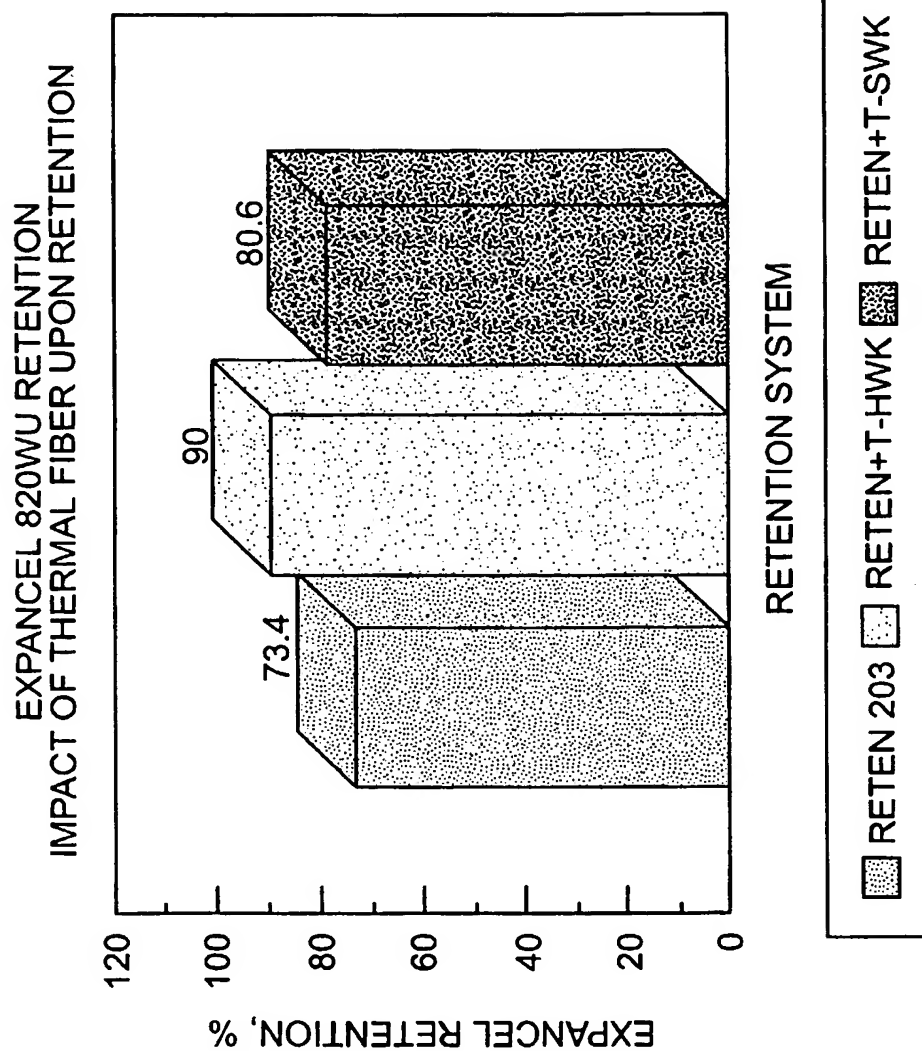


FIG. 31E

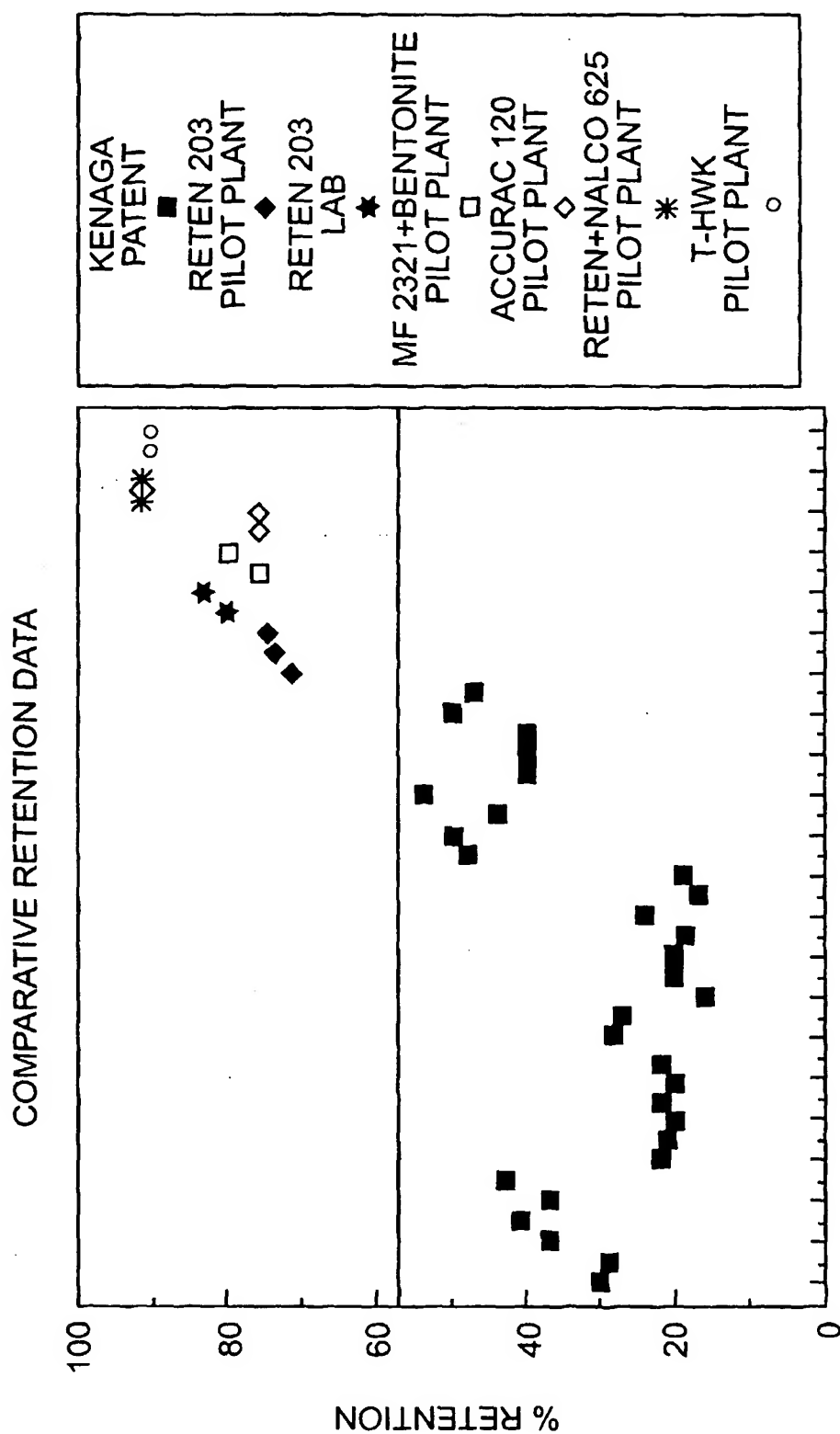
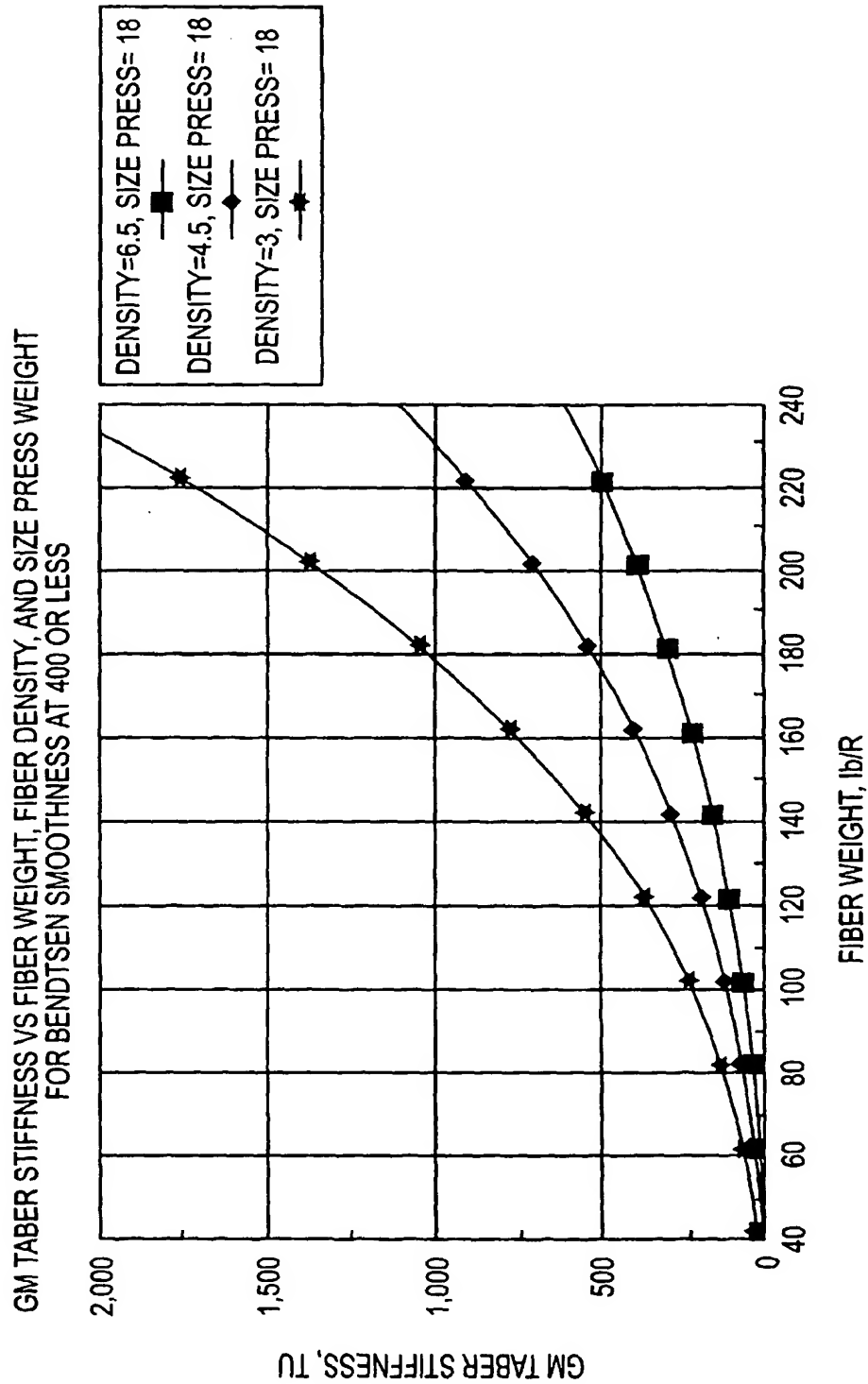


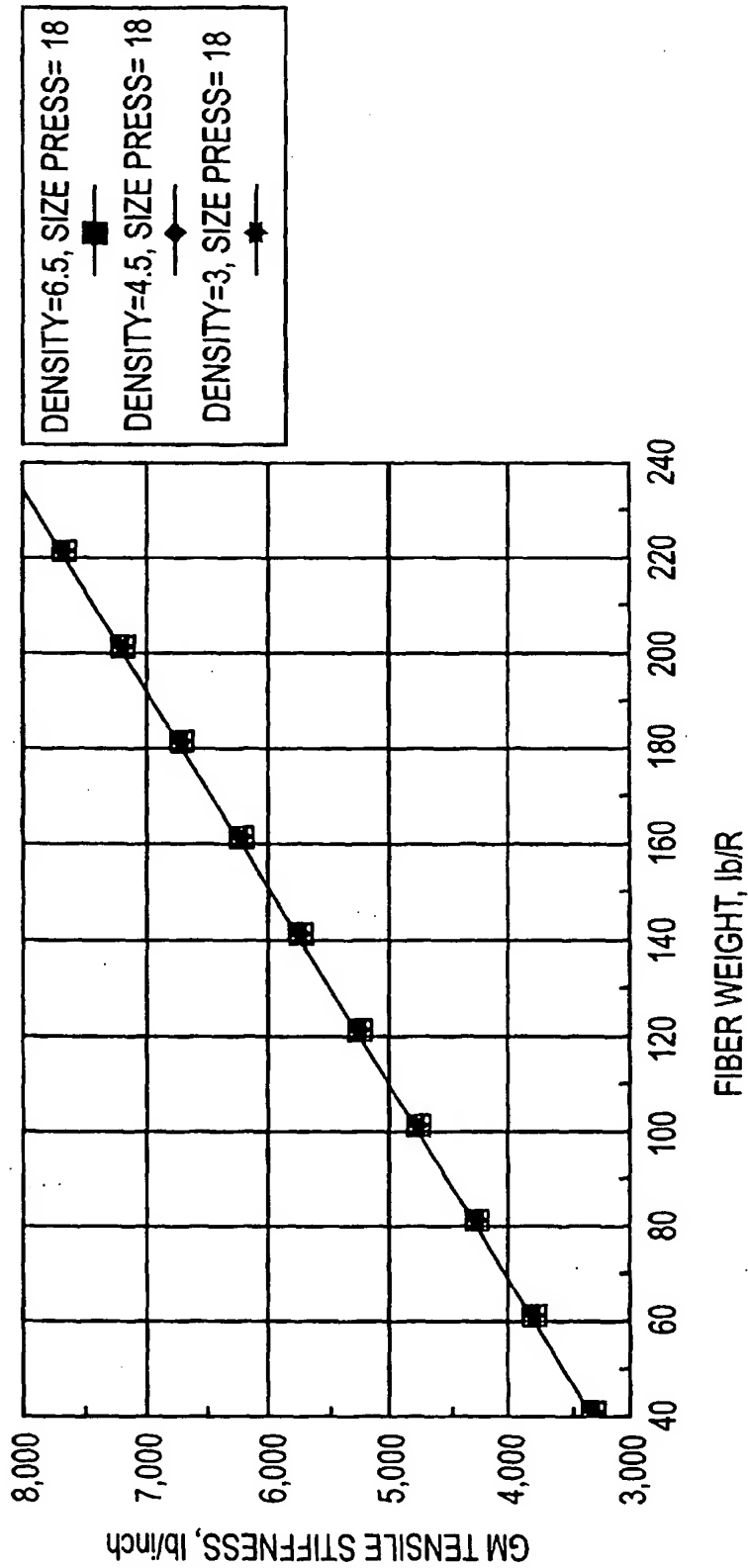
FIG. 32



1. DENSITY VALUES SHOWN ARE FIBER MAT DENSITIES. (FIBER WEIGHT/CALIPER)

FIG. 33

GM TABER STIFFNESS VS FIBER WEIGHT, FIBER DENSITY, AND SIZE PRESS WEIGHT
FOR BENDTSEN SMOOTHNESS AT 400 OR LESS



1. DENSITY VALUES SHOWN ARE FIBER MAT DENSITIES. (FIBER WEIGHT/CALIPER)

FIG. 34

PROCESS FOR MANUFACTURING
WAX-TREATED CUPS

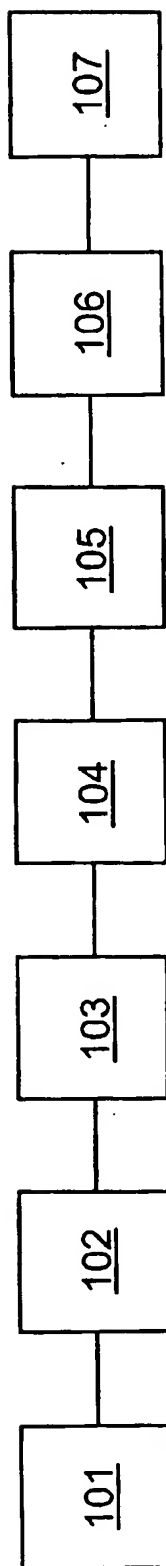


FIG. 35

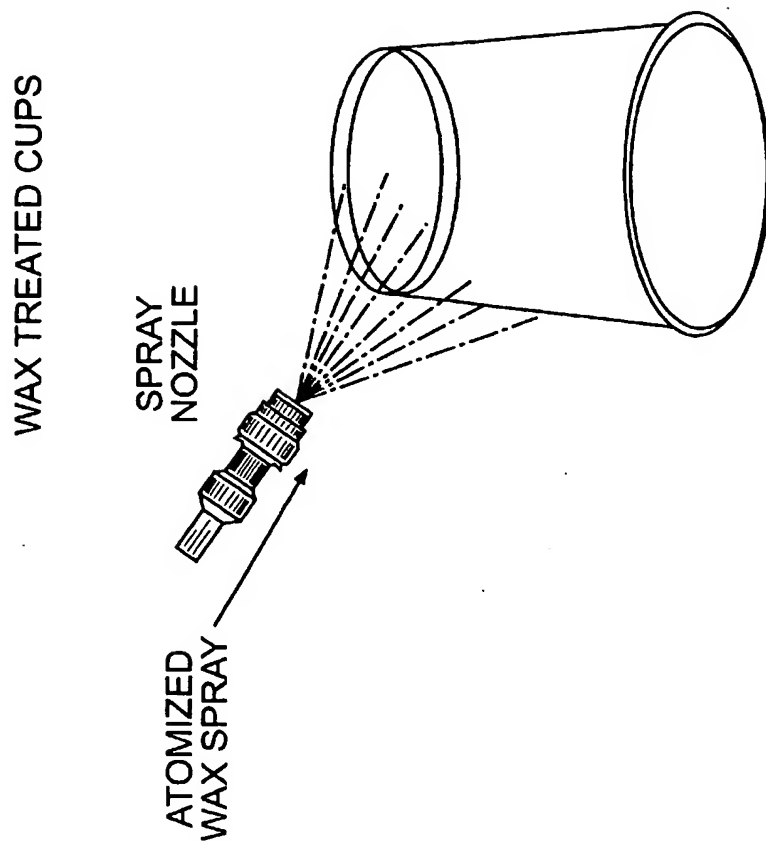


FIG. 36B

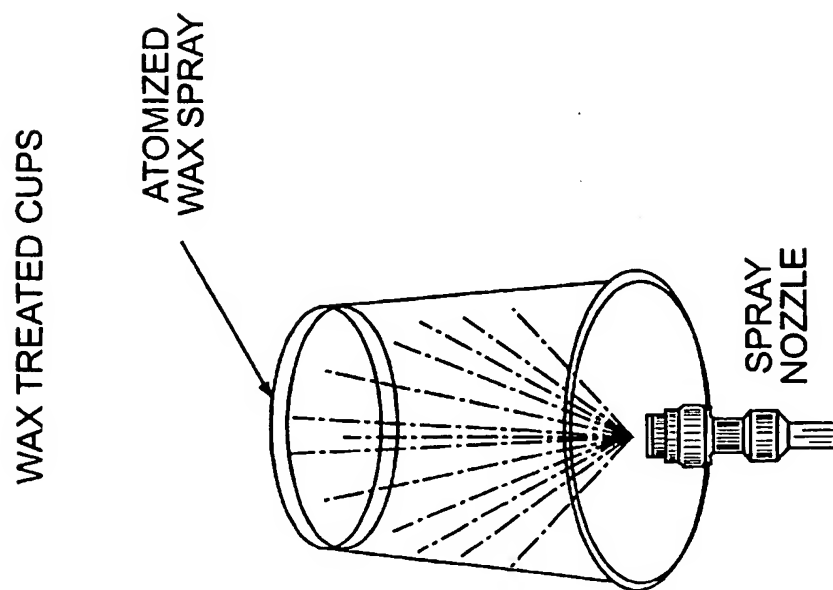


FIG. 36A